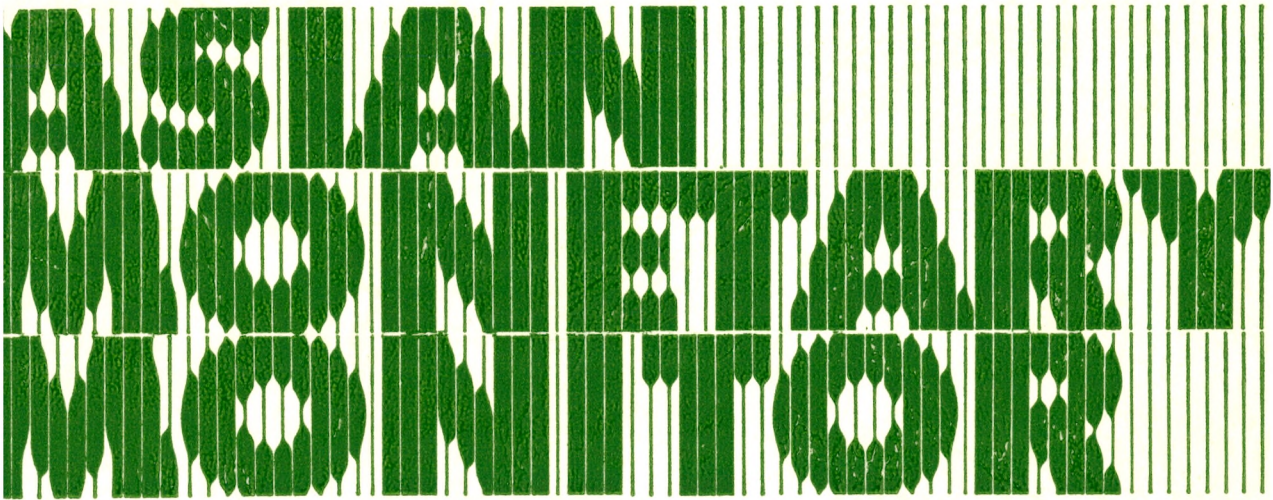




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Asian Monetary Monitor is a bimonthly publication specialising in the analysis of economies along the Asian Pacific Rim. Sold by subscription only, price US\$200 p.a. inclusive of air mail delivery to any part of the world. Correspondence and subscriptions should be addressed to The Editor, Asian Monetary Monitor Ltd., P. O. Box 30724, Causeway Bay, Hong Kong.

EDITOR:

John G. Greenwood

M.A. (Hons) Econ. Edinburgh
Research Economist, University of Tokyo
Economist at G.T. Management (Asia) Ltd.

**CONTRIBUTING
EDITORS:**

Hugh P. Sloane

B.A. Econ. Bristol
M. Phil. Econ. Oxford
Economist at G.T. Management (Asia) Ltd.

Tim J. Lee

B.A. Econ. Cambridge
Economist at G.T. Management (Asia) Ltd.

**CHARTS AND
STATISTICS:**

S.Y. Chan

Michael Wong

ADMINISTRATION:

Isabella Ling

Asian Monetary Monitor is published in

association with the



group of companies

ASIAN MONETARY MONITOR

January - February, 1985

Vol. 9 No. 1

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KEY TO SYMBOLS USED IN THE CHARTS

% RP - Percentage Rate of change over Preceding period.

% RS - Percentage Rate of change over Same period of preceding year.

SA - Seasonally Adjusted.

SAAR - Seasonally Adjusted at Annualised Rate.

REGIONAL SURVEY

WHY EAST ASIAN COUNTRIES HAVE ADJUSTED BETTER TO EXTERNAL SHOCKS THAN OTHER LDCs

Developing market economies of East Asia have survived the turbulent international decade since the 1973 oil price increase better than most other developing countries. Nevertheless, the deep international recession of 1982-83, the steep rise in international interest rates, and the further increase in energy prices after 1979 have hit many economies in the region extremely hard. For the group as a whole, GDP growth declined to less than 5 percent per annum during 1980-83. But its average of 7 percent over the past decade was still markedly better than the 4 percent average annual growth achieved by all developing countries. Even though the external debt burden has increased in East Asia, the increases have been less than elsewhere and borrowing capacity will be generally less of a constraint on future growth.

During the last two decades most East Asian countries have experienced outstanding social and economic progress. GNP per capita growth during 1960-82 was distinctly above average, except in the Philippines. At the same time, food supplies have improved, and the incidence of absolute poverty has fallen in almost all countries. Impressive gains in welfare, measured by increased life expectancy, reduced infant mortality rates, and higher adult literacy rates, have been made. Finally, East Asian countries have been relatively more successful in transforming the structure of their economies, in developing human capital, and building up institutions.

The seeds of this successful adjustment can be traced to the very policies that promoted rapid growth in the 1960s. This article discusses these policies in the large market economies of East Asia (Indonesia, Korea, Malaysia, the Philippines, and Thailand), outlines the external shocks they have faced, and analyzes their generally successful pursuit of economic adjustment.

FACTORS IN RAPID GROWTH

Development results from the complex interaction of a number of historical, political, cultural, economic, and social factors and is unique to each country. However, there are a number of common elements in the dynamic growth of the East Asian economies. First and most important is political continuity and generally strong government commitment to development; second is their strong emphasis on education; third, their export orientation; fourth, their concern with agriculture; and, fifth, their mobilization of large volumes of domestic and foreign savings. These have been associated with a pragmatic economic management that has relied considerably on market forces, used selective and relatively effective state interventions, and has been flexible and, on the whole, responsive to changing international conditions. Finally, knowledgeable and sustained technocratic leadership has been available to design and implement desired economic policies.

There has, of course, been considerable diversity among the countries in terms of the speed and level of their development and the effectiveness of their policies. Some of the current economic difficulties being faced by the Philippines, for instance, are due not only to political factors and a very difficult international economic environment but also to less-than-firm economic management under which resource mobilization needs have been neglected, consumption growth maintained notwithstanding a sharp deterioration in terms of trade, and a growing investment program financed by relatively short-term borrowing. Still in the overall perspective of developing countries and in terms of macroeconomic indicators, the performance of the Philippines during the last decade has been, if anything, somewhat above average.

This article, by Parvez Hasan, is adapted from "Finance and Development", (December 1984) a quarterly publication of the International Monetary Fund and the World Bank. Dr. Hasan has a Ph.D. from Yale University, and was Chief Economist, East Asia at the IBRD/World Bank.

FOREIGN TRADE ORIENTATION

Almost all East Asian economies have been more open than either an average middle-income country or a typical industrial market economy, and the rapid growth of their foreign trade sectors is perhaps the most well-known feature of their development. Many factors have contributed to this vigorous export expansion, but the growth in their manufactured exports has emerged as the most dynamic, and will crucially influence whether or not exports will continue to grow faster than national product. The outstanding success of Korea in exporting manufactured goods is recognized. But exports of manufactured goods from the Philippines, Malaysia, and Thailand have also risen - at rates averaging 20-30 percent per annum for a decade. Even in Malaysia, where exports of petroleum, timber, rubber, and palm oil have also risen dramatically, manufactured exports have accounted for over 35 percent of incremental export earnings over the past decade. As a result, the structure of exports has undergone a major change in all these countries.

In expanding their exports of manufactured goods, the East Asian countries have taken advantage, first of all, of favourable international developments. World economic activity has shown sustained growth during the last two decades, and world trade has grown substantially faster than output, greatly facilitated by liberalization in the industrial countries. In addition, these countries have been able to increase their market share by export promotion policies - such as the maintenance of realistic exchange rates, the avoidance of discrimination against exports, or the compensation of exporters for a bias in favour of domestic industry.

These countries have also benefited from wider markets and technology transfer. International trade has been an important source of information on new products, new designs, and new production processes. For capital-scarce countries, the concentration on labour-intensive manufactured exports with low capital/output ratios has provided important opportunities for maximizing output and employment per unit of investment. Finally, the discipline of international markets has been generally beneficial for economic policies.

AGRICULTURAL PERFORMANCE

Although manufacturing has clearly been the leading sector, the contribution made by high agricultural growth in these countries - sustaining overall growth, direct and indirect job creation, strengthening the balance of payments, and poverty alleviation - is not fully appreciated. The home market for manufactured goods has been crucial, and the rate of growth of agricultural production and incomes has been an important determinant of the rate of expansion of this market.

The agricultural performance of many East Asian countries has been truly outstanding. Over the last two decades, agriculture in Korea and Indonesia has grown by almost 4 percent per annum. In Malaysia, the Philippines, and Thailand, annual growth rates have been close to 5 percent. Increased irrigation, improved crop varieties, and greater use of fertilizer have typically been the most important sources of agricultural growth. Government agricultural programmes and policies, emphasizing incentives and investments, have in most cases combined with responsive and dynamic private sectors to offset the effect of increasing population pressure on land resources.

Crop diversification (as in Thailand, Malaysia, and the Philippines) and improved productivity in existing crops in response to less favourable price prospects (like rubber in Malaysia) have been vital for sustaining agricultural growth. This needed policies that permitted output to adjust relatively quickly to shifting comparative advantage and new economic opportunities.

The surge in investments, which resulted in a tremendous expansion of physical and

social infrastructure and human and industrial capital has, on the one hand, fueled the high GNP growth rates and, on the other, has itself been financed by rapidly rising incomes. Whereas in developing countries as a whole, the investment rate as a percentage of GNP rose from around 20 percent in 1960 to 24 percent in 1982, the corresponding increase in the market economies of East Asia was from 12 to 27 percent. Foreign capital inflows have been an important source of financing, but 80-85 percent of gross investment in recent years has been met from domestic savings. Typically, at least a quarter of the incomes arising out of the growth process have been saved. The most dramatic rises in domestic saving rates have been in Korea (from 1 to 22 percent between 1960 and 1982) and in Indonesia (8 to 23 percent). Maintenance of attractive returns to savers through positive real interest rates, developed financial institutions, and attractive opportunities for private investment have been among the factors responsible for the excellent record of domestic resource mobilization.

ROLE OF ECONOMIC POLICIES

In the final analysis, the huge success of these countries is the result of effective economic policies. By and large, they have placed considerable reliance on market forces. This has two aspects. First, the state enterprise sector is, and has remained relatively small, and has been largely confined to energy-related activities. Second, price distortions have been relatively limited.

In developing countries, there is a growing body of evidence on the benefits of using prices to reflect scarcities and encourage growth. The issue of price distortions has been widely researched and was a special focus of the World Bank's 1983 World Development Report. Thailand, Korea, Malaysia, and, somewhat surprisingly, the Philippines were among the relatively few countries where key economic prices (the exchange rate, wages, interest rates, and power rates) were not too out of line with opportunity costs, where protection of manufacturing or export taxation on agriculture was generally moderate, and where inflation was kept within limits. These countries were notable for keeping exchange rates competitive, which contributed significantly to their export success.

While prices do matter for growth, the Bank's analysis suggested that price distortions explained only a part of the variation in growth performance among countries in the 1970s. The rest was the result of other economic, social, political, and institutional factors. It is not the absence of state interventions but rather the selectivity and effectiveness of their use that distinguished the market economies of East Asia from many other developing countries. The strong policy and investment support provided for agricultural systems, human resource development, and export zones was the key factor in accelerated economic development. In Korea, the Government was also successful, at least until the mid-1970s, in encouraging the development of heavy industries such as shipbuilding, and it has provided an important stimulus for technology-based development by promoting research and development institutions.

Macroeconomic management in East Asia has also been characterized by (1) a basic stability and predictability of major policies; (2) given these, a high degree of policy flexibility and a quick responsiveness to changing economic circumstances; and (3) very close attention to the integration of economic policies, leading to a considerable cohesion in overall development strategies. These, in turn, have been influenced by continuity of political and economic leadership.

EXTERNAL SHOCKS

These factors have enabled East Asia to cope with a series of external shocks since 1973 relatively well. The 1973 oil price increase meant a loss of GNP of 5.8 percent, 4.4 percent, and 3.4 percent, respectively, for Korea, Thailand, and the Philippines, the three major oil importing developing countries in the region. New oil price increases during

TABLE 1

GROWTH PERFORMANCE
(Average annual growth rates, in percent)

Country/ territory	GNP per capita 1960-82	GDP 1970-82	Agri- culture 1970-82	Manu- facturing 1970-82	Merchandise exports 1970-82	Inflation 1970-82
Hong Kong	7.0	9.9	na	na	9.4	8.6
Indonesia	4.2	7.7	3.8	13.4	4.4	19.9
Korea	6.6	8.6	2.9	14.5	20.2	19.3
Malaysia	4.3	7.7	5.1	10.6	3.8	7.2
Philippines	2.8	6.0	4.8	6.6	7.9	12.8
Singapore	7.4	8.5	1.6	9.3	na	5.4
Thailand	4.5	7.1	4.4	9.9	9.1	9.7
Middle income countries	3.6*	5.4*	3.0**	6.5**	2.6**	12.8**

Source: World Bank, World Development Report 1984.

Note: na denotes data not available. * Weighted average. ** Median.

1979-80 added a further burden - ranging from 6 percent of GNP in Korea to 3.7 percent in the Philippines - to the balance of payments. For all three countries, the additional rise in oil prices in 1979 came at a time of weakening international demand for their exports, and - for all countries except Korea - of a sharp deterioration in the non-oil commodity terms of trade. Last but not least, real interest rates shot up sharply in 1981-83, as nominal interest rates rose and international inflation declined; these imposed an additional debt burden of 3 percent of GNP per annum in Korea and around 2 percent in the Philippines.

Indonesia has been faced with an adjustment problem of a different kind. Higher oil prices after 1973 meant a gain of 9 percent of GNP over 1973-75; from 1978-80, the terms of trade gain, arising mainly out of higher oil prices, was equivalent to 14 percent of GNP. But since 1981 net oil and gas revenues, after an increase of over \$6 billion between 1978 and 1980, fell by \$4 billion in 1983 and will rise very little during 1984 and 1985. Malaysia, which has an export-to-GNP ratio of over 50 percent, has witnessed great instability in exports, whose purchasing power expanded at an average annual rate of 9 percent during 1973-80 but dropped by 6 percent per annum during 1980-82. The reduction in the real value of exports amounted to a decline in GNP of over 10 percent over the three-year period.

These huge swings were a consequence of openness, and reflected the recent great volatility in the international prices of raw materials and energy and in interest rates. In contrast, industrial countries suffered a loss of 2 percent of GNP with each of the oil shocks. The surprise is not that growth in these East Asian countries slowed to 3 percent per annum during 1982-83, but that it continued at all. The great resilience of their economies in the face of sudden and unexpected changes can be traced to their determined pursuit of structural adjustment policies related to energy prices and production, investment, and exports over the last decade.

STRUCTURAL ADJUSTMENT

Energy

Korea, Thailand, and the Philippines are heavily dependent on imported oil; in 1980, energy imports accounted for the great bulk of their commercial energy consumption and for about one third of total imports in each. Before 1973, dependence on imported energy was growing rapidly. It is hardly surprising, therefore, that the fivefold rise in real petroleum prices during the last decade has entailed major domestic adjustments in these countries. Reducing dependence on imported energy is now an important objective of national policy in all three countries, and reduced dependence on imported oil a secondary objective. To achieve these, actions have been taken to reduce the growth of demand, increase the supply of domestic energy, and diversify the sources of energy imports.

Considerable progress has already been made, especially since 1979. The volume of oil imports has decreased somewhat during the last few years, only partly because of the overall economic slowdown. Pricing policies, particularly in Korea and the Philippines, have been the most powerful instrument in reducing domestic demand for energy. In Indonesia, where domestic oil prices have historically been low, average prices have been raised over threefold since January 1982. Energy prices not only affect the final demand but strongly influence the pattern of future output and expenditures, including the structure of transport. Scaling down or eliminating energy-intensive industries has been an important corollary of sharply increasing domestic energy prices.

Energy conservation and demand management have been combined with major efforts to increase domestic production of energy, particularly in Korea (through its nuclear programme), the Philippines, (through the development of geothermal, coal, and hydro resources), and Thailand (through the expansion of natural gas, lignite, and hydroelectric power).

The programmes for expanding domestic energy production are generally well-conceived. But investment requirements of energy development remain very large, notwithstanding the recent general downward revision of power investment programmes, and will put a major strain on resources. Net import substitution in energy should have higher priority than reduction in dependence on imported oil, particularly if switching between imported fuels requires heavy capital outlays.

Trade

Despite being faced with more difficult balance of payments positions and sluggish growth in international trade since 1980, the market economies of East Asia have not turned inward. All have continued to emphasize export development and have strengthened export incentives.

Some countries have initiated efforts to reduce protection for domestic industry through tariff reductions and import liberalization. The Korean government, for instance, has decided to carry out a major reform of the import tariff system to promote further the competitiveness of Korean industries. Korea has also liberalized foreign investment to promote industrial efficiency to accelerate technological development. In the Philippines a major programme of tariff reductions, import liberalization, and reform of the industrial incentive system was initiated in 1980, though it has suffered a setback in the last year due to the debt crisis.

The push to increase the attractiveness of exports and to reduce the domestic protection of industry has not been easy politically, against a background of sluggish world trade. In East Asia, as elsewhere, there is genuine internal debate on the extent of state support required for industrialization. Further, liberalization of imports and reduced protection for industry, while essential for improving efficiency, could meet increasing resistance even in East Asian countries if the protectionist pressures in the

developed world continue to grow and if world trade does not resume its healthy growth. Efforts to liberalize imports have also implied additional risks as foreign exchange resources have become scarcer. Fortunately, manufactured exports from these East Asia countries have held up relatively well during the recent deep recession, expanding at an average annual rate of 13 percent during 1980-83, compared with 5 percent for developing countries as a whole. This suggests that its better domestic policy environment governing exports continues to be a significant factor in East Asia's greater success in exporting. Needless to add, this pay-off to export-oriented policies serves to reinforce these policies themselves.

Investment

The speed and flexibility in policy implementation have also been demonstrated through major downward adjustments in the investment programme in almost all East Asian countries during the last few years. Two examples illustrate the common approach.

In Indonesia, a weaker demand for oil, the lower oil prices of early 1983, and a sharp decline in non-oil exports as a result of the deep international recession produced a fundamentally changed resource outlook. The Government acted swiftly. In addition to allowing sharp increases in the prices of domestic oil and fertilizer in early 1983, it devalued the exchange rate in March 1983. A comprehensive reassessment of the public investment programme was initiated, and imports of capital goods were reduced by postponing a number of major projects with a high foreign exchange content. At the same time, high priority continued to be attached to projects that created employment, supported agricultural development, and promoted human resource development through the expansion of social services. These measures have had a remarkable effect on the balance of payments; the current account deficit fell from \$7.1 billion in 1982-83 to \$4.2 billion in 1983-84. To reduce the deficit further, only a limited increase in total investment is forecast for 1982-85.

Malaysia, traditionally a resource-rich country, has in recent years faced large public sector and balance of payments deficits. These are partly cyclical but have also been related to a tremendous expansion of public sector activities in recent years in support of important social and economic goals. In 1983, concerned with the growing burden of domestic and external debt, the government initiated actions that may reduce real federal government spending by perhaps as much as 20 percent by 1985. Thus, in Malaysia as in other countries, the focus has shifted from the sheer size of public sector expenditures to their efficiency and effectiveness.

Adjustment costs

These adjustments were necessary but have not been without cost. In Korea, where the adjustment has already proceeded quite successfully, there was little growth in per capita consumption over 1979-82, and real wages declined by 8 percent during 1980-81. In the Philippines, average per capita consumption is likely to be no higher in 1985 than in 1980. In Indonesia, average per capita consumption, after very rapid growth during 1975-82 (which was nearly 7 percent per annum), will show a small decline over two years, 1983 and 1984. Managing adjustment in these circumstances in such a way that employment and incomes of the poorer groups are not seriously affected presents a tremendous further challenge to the skill and ingenuity of policy makers in these countries. Even in Thailand, where consumption has continued to expand, no significant progress has been made in poverty eradication since the mid-1970s.

INTERNATIONAL SUPPORT

If the difficult and delicate process of structural adjustment is to succeed, the domestic efforts of developing countries require strong international support. World Bank forecasts indicate that the annual growth in the industrial countries over the next

decade will be nearly 3 percent, substantially below the 4.9 percent of 1960-73, but much higher than the average annual rate of the last ten years (a little over 2 percent), which included two serious recessions. A sustained recovery in trend growth cannot, however, be taken for granted. It will require continued control of the growth in demand for energy and of fiscal deficits, reduced international interest rates, and greater coordination of monetary and exchange rate policies among the major countries. Moreover, recovery in the industrial countries will assist, but not ensure, good access to their markets by developing countries; resistance to protectionist pressures will also be necessary. Last, but not least, a continued expansion of net commercial bank lending to the developing world will also be crucial.

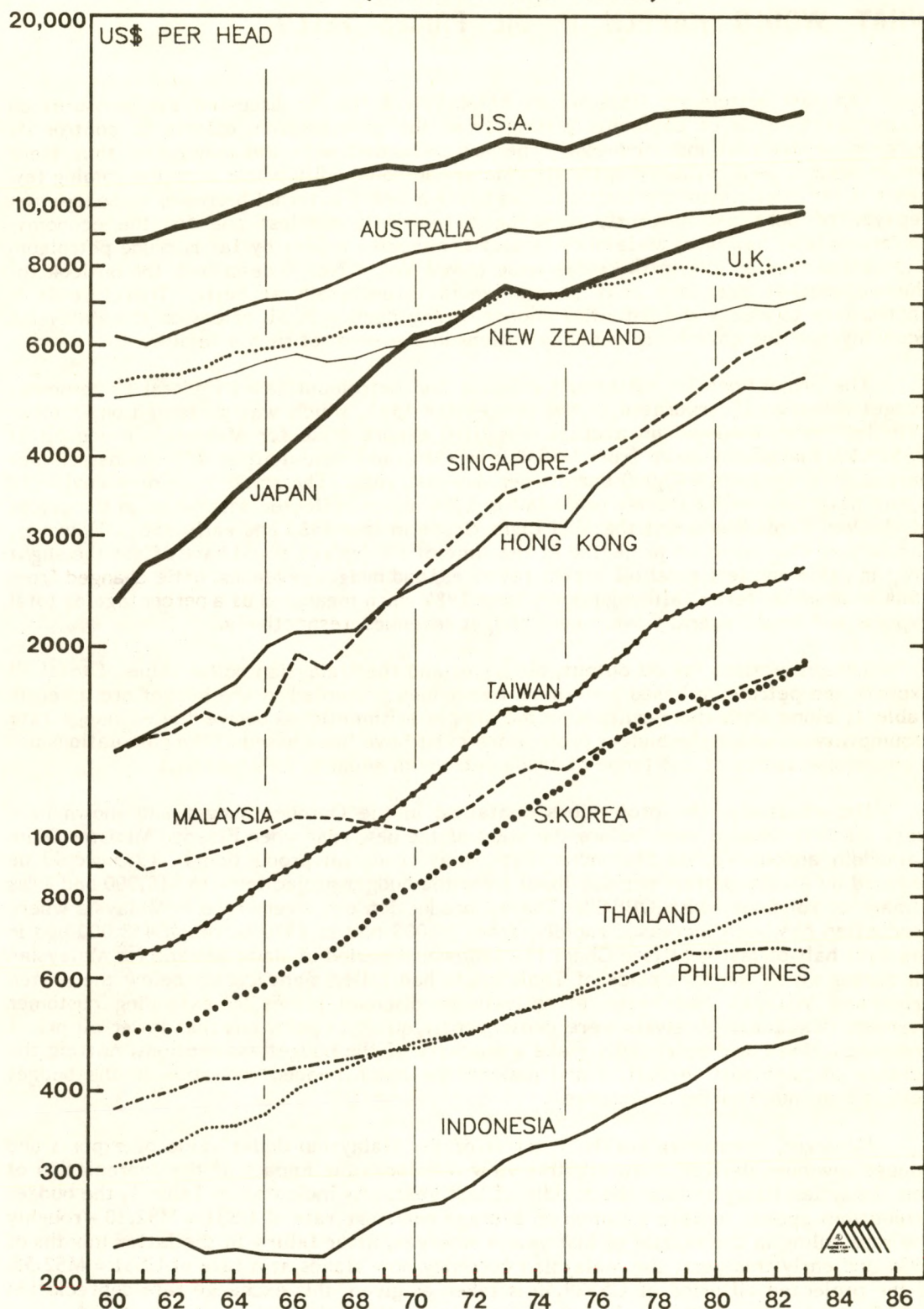
External debt management issues will require especially careful handling by both borrowers and lenders. The total external debt of East Asian economies is less than one sixth of the total debt outstanding of developing countries. The burden of debt - measured by the ratio of either total debt or annual debt-service payments to exports of goods and services - is also clearly lower in East Asia than in some of the heavily indebted Latin American countries. But this burden has nonetheless grown, notwithstanding a more than fivefold growth in the nominal export earnings of this group of countries in the last decade, and reflects mainly hardening of the terms of debt. For Indonesia, Korea, Malaysia, the Philippines, and Thailand, debt-service payments, including interest on short-term debt, rose from 14 percent of export earnings in 1973 to 20 percent in 1983. The relative decline in the reliance on flows of official assistance is in itself not undesirable for countries that show increasing capacity for self-sustained growth. But this shift has been too sudden and has coincided with a period when real interest rates on borrowing from financial markets have been very high.

At least in East Asia, the high level of real interest rates - and not any failure of exports or real waste of investment resources - is the primary factor behind the growth in their burden of external debt. The very high real interest rates on private lending, estimated at over 14 percent per annum during 1981-83, emerged because inflation has decelerated suddenly but inflationary expectations have not changed. The sharp rise in the value of the dollar has also added to the real interest burden, since most of the debt is denominated in dollars. Without a very substantial decline in real interest rates, the debt problem could totally disrupt the development process, even with sustained international recovery. It is simply not within the debt-carrying capacity of developing nations to pay real interest rates of say 9-10 percent for any length of time. Indeed, the wisdom of large additional borrowing at such interest rates can be questioned.

But even with lower real interest rates, the net capital requirements of developing countries, including those of East Asia, will remain sizeable. The Bank has lent over \$10 billion to the East Asian countries (excluding China) during the last four years (fiscal years 1981-84). This lending has been directed especially toward support of structural adjustment programmes and policies. The Bank's dialogue with governments on economic issues has been extremely active and there has generally been agreement on broad directions of policy change and reform. It is hoped that this dialogue will continue, and the real volume of lending at least maintained for the next several years. But the bulk of external capital needs in East Asia will have to be met from commercial sources. Provided the international economic trend remains reasonably favourable and international interest rates drop from the very high current levels, debt servicing will not pose serious difficulties in East Asia.

For other Third World countries, the developing market economies of East Asia may be seen as providing a powerful "demonstration effect" through the outward orientation of their economic policies, their reliance on market signals, the stability and predictability of their macroeconomic policies, and their avoidance of confrontation between government and business.

REAL PER CAPITA GDP (CONSTANT 1983 PRICES)



MALAYSIA

WHAT WOULD HAPPEN IF OIL PRICES FELL?

Our last article on Malaysia in AMM Vol. 8 No. 5, discussed the pressures on Malaysia's balance of payments arising from the government's efforts to control its burgeoning external indebtedness. The article ended with the conclusion that there would need to be a sustained uptrend in Malaysian commodity prices over the coming few years if the government's transition from being a heavy external borrower to being a net repayer of debt and interest, is to be a relatively painless one for the economy. Unfortunately, however, Malaysia's largest commodity export by far is crude petroleum and as a survey article in the same issue (AMM Vol. 8 No. 5) described, the outlook for the oil market over the next several years is uncertain at best. Therefore it is appropriate to assess the potential impact of any decline in oil prices on the Malaysian economy, and the government's policy options in the event of such a decline.

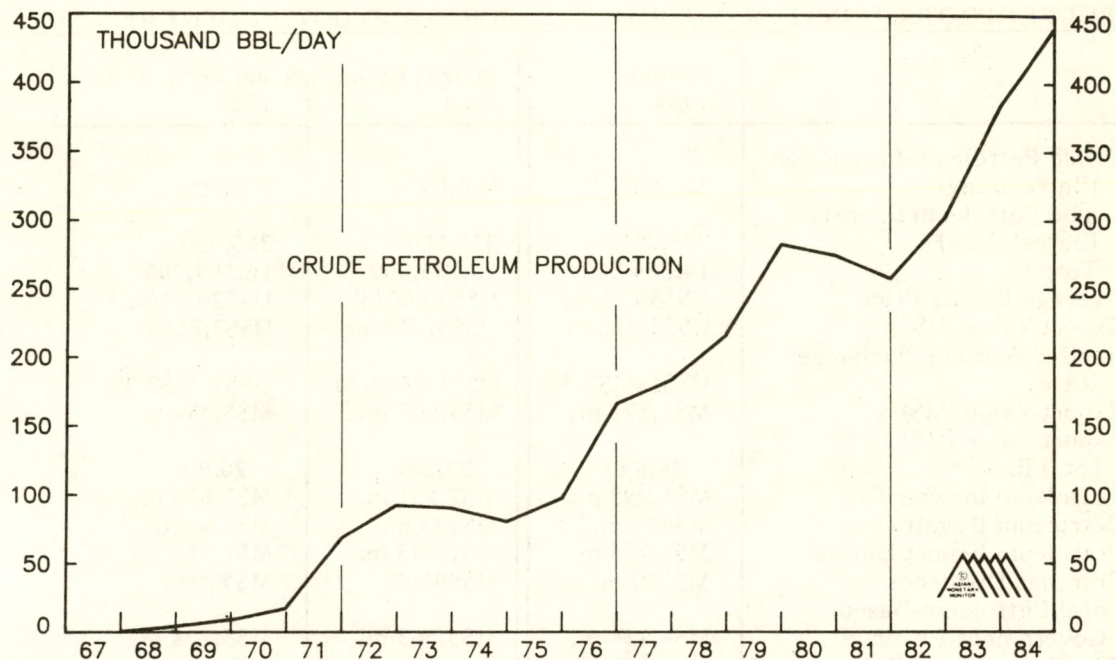
The projections for oil export revenue and petroleum based Federal Government budget revenues incorporated in the budget for 1985, which was presented on October 19th last year, assumed an average weighted export price for Malaysian crude oil of US\$29.50, marginally down from US\$30.0 in 1984, and oil output at 450,000 barrels per day, slightly up from 440,000 barrels per day last year. The small price drop envisaged would have followed a similar price fall in 1984 which reflected small cuts in the prices of the key Tapis Blend and the Miri Light Crude in late 1983 and early 1984. However, the further rise in output projected at the time of the budget would have offset the slight drop in price and left total oil export revenues, and budget revenues, little changed from 1984 in absolute terms, although down from 1984 when measured as a percentage of total exports and total Federal Government budget revenues, respectively.

The projections for oil output, oil prices and the Malaysian dollar value of total oil exports and petroleum based government revenues presented in the budget are given in Table 1, along with the results of some simple arithmetic to derive the exchange rate assumption on which the budget projections must have been based. (The calculations use a conversion factor of one tonne of crude petroleum equal to 7.60 barrels.)

Unfortunately, the projections contained in the October budget and shown here were made redundant even before the start of the new year when Finance Minister Daim Zainuddin announced, on December 26th, that crude oil production in 1985 would be reduced by 40,000 barrels per day (bpd) from the budget projection - to 410,000 bpd - "as a mark of solidarity with OPEC". The oil production cut - very rare in Malaysia where production has been increased rapidly, from 18,000 bpd in 1970 to reach 458,000 bpd in the first half of last year (see Chart 1) - followed a period of slack demand for Malaysian oil during which the spot price of Tapis crude had fallen significantly below the posted price and Malaysia had begun effectively to discount prices by extending customer payment deadlines. Analysts were consequently quick to point out that lower oil prices and production could potentially make a mockery of the budget assumptions, putting the balance of payments in deficit and making the much needed reduction in the budget deficit that much harder to achieve.

However, when seen purely in terms of the Malaysian dollar value of exports and budget revenues derived from oil, this view overlooks the impact of the depreciation of the Malaysian Ringgit since the middle of last year. As indicated in Table 1, the budget projections appear to have assumed an average exchange rate of US\$1 = M\$2.30 - roughly the rate ruling in the middle of last year - whereas, after falling in the latter months of 1984 and early this year, the Malaysian currency now stands at a rate of US\$1 = M\$2.55. If the projected oil price of US\$29.50 is taken as given, this exchange rate depreciation would completely offset the oil output cut to leave Malaysian dollar oil export and

MALAYSIA: CHART 1
CRUDE PETROLEUM PRODUCTION



MALAYSIA: CHART 2
PETROLEUM EXPORTS RELATIVE TO TOTAL EXPORTS

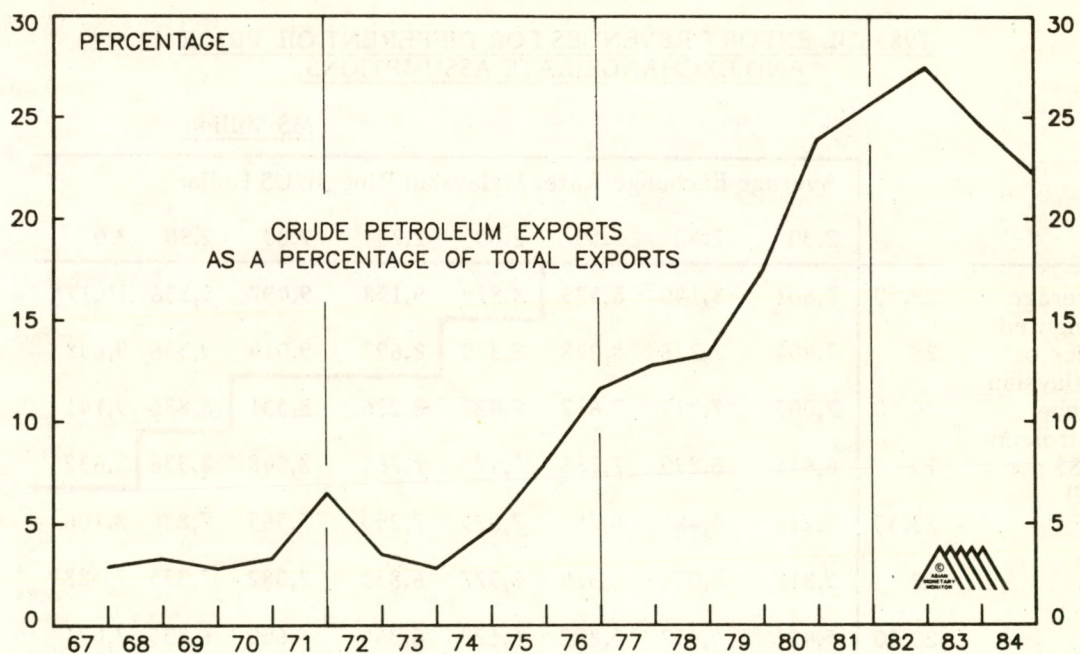


TABLE 1

BUDGET PROJECTIONS FOR OIL OUTPUT, EXPORTS AND GOVERNMENT REVENUE

	Actual 1983	Budget Estimates and Projections	
		1984	1985
Crude Petroleum Production (Barrels/day)	383,000	440,000	450,000
Crude Petroleum Exports (Barrels/day)	296,200	335,000	345,000
Tonnes	14,224,000	16,133,000	16,569,000
Average Export Price	US\$30.71/b.	US\$30.00/b.	US\$29.50/b.
Export Value (US\$)	US\$3,320 m.	US\$3,670 m.	US\$3,715 m.
Implied Average Exchange Rate	US\$1=M\$2.37	US\$1=M\$2.30	US\$1=M\$2.30
Export Value (M\$)	M\$7,871 m.	M\$8,460 m.	M\$8,544 m.
Export Value (M\$) as % Total Exports	24.6%	22.2%	20.9%
Petroleum Income Tax	M\$1,998 m.	M\$2,551 m.	M\$2,670 m.
Petroleum Royalties	M\$480 m.	M\$525 m.	M\$556 m.
Petroleum Export Duties	M\$1,476 m.	M\$1,493 m.	M\$1,512 m.
Petronas Dividends	M\$500 m.	M\$994 m.	M\$500 m.
Total Petroleum-Based Government Revenue	M\$4,454 m.	M\$5,563 m.	M\$5,238 m.
Petroleum-Based Revenues % Total Revenue	23.9%	26.7% -	23.9%

TABLE 2

1985 OIL EXPORT REVENUES FOR DIFFERENT OIL PRICE
AND EXCHANGE RATE ASSUMPTIONS

		M\$ Million							
		Average Exchange Rate: Malaysian Ringgit/US Dollar							
		2.30	2.40	2.50	2.60	2.70	2.80	2.90	3.0
Average weighted price of Malaysian Crude Petroleum (US\$ per bbl)	29.50	7,801	8,140	8,479	8,819	9,158	9,497	9,836	10,175
	28	7,404	7,726	8,048	8,370	8,692	9,014	9,336	9,658
	26.50	7,007	7,312	7,617	7,922	8,226	8,531	8,836	9,141
	25	6,611	6,899	7,186	7,473	7,761	8,048	8,336	8,632
	23.50	6,214	6,485	6,755	7,025	7,295	7,565	7,836	8,106
	22	5,818	6,071	6,324	6,577	6,830	7,082	7,335	7,588
	20.50	5,421	5,657	5,892	6,128	6,364	6,600	6,835	7,071
	19.0	5,024	5,243	5,461	5,680	5,898	6,117	6,335	6,554

budget revenues roughly unchanged. This follows if oil production of 410,000 bpd is taken as implying exports of 315,000 bpd (implied by the export/output ratio assumed in the budget) which would generate revenues of US\$3,392 m, translated into M\$8,649 m at an average exchange rate of US\$1 = M\$2.55.

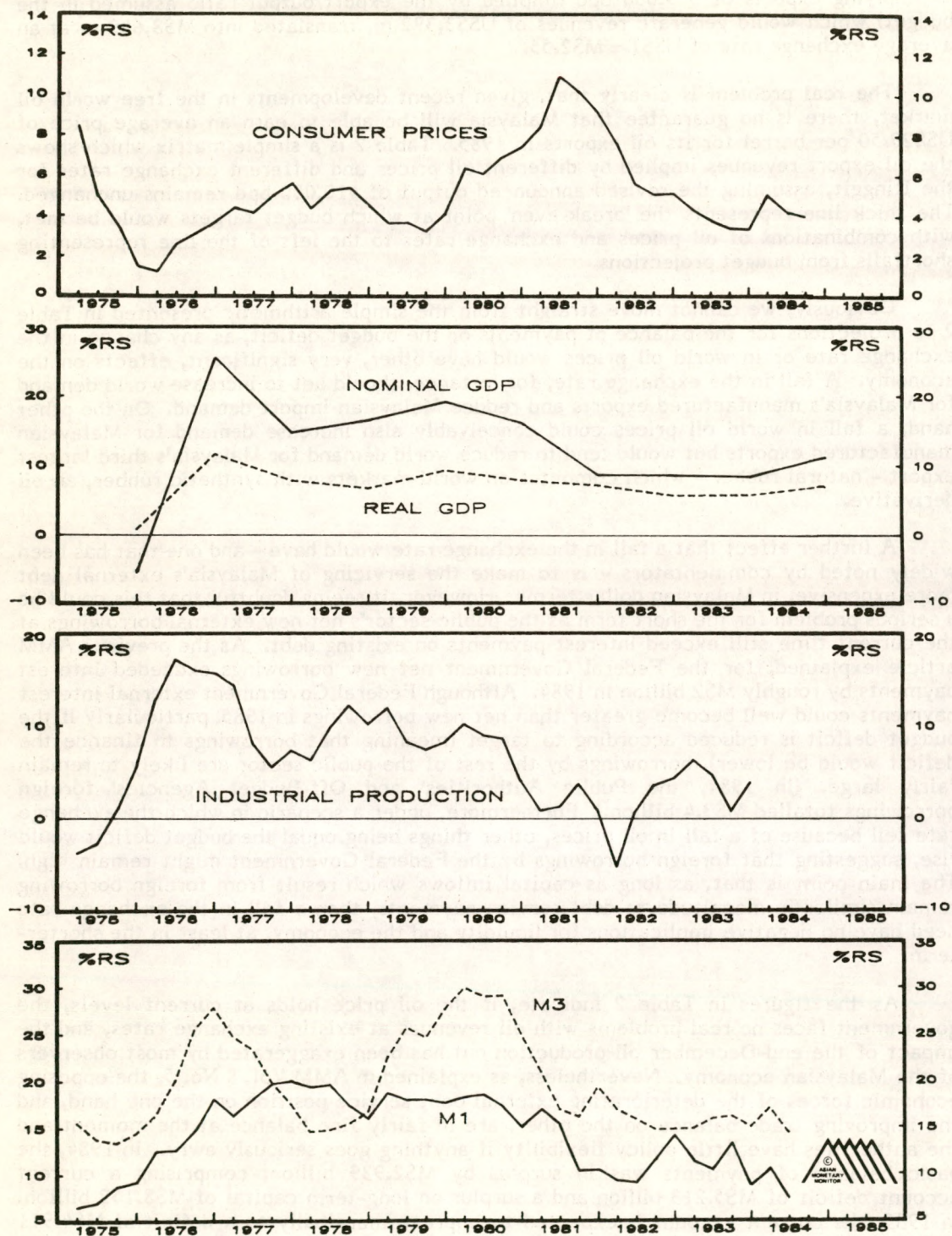
The real problem is clearly that, given recent developments in the free world oil market, there is no guarantee that Malaysia will be able to earn an average price of US\$29.50 per barrel for its oil exports in 1985. Table 2 is a simple matrix which shows the oil export revenues implied by different oil prices and different exchange rates for the Ringgit, assuming the revised announced output of 410,000 bpd remains unchanged. The thick line represents the 'break-even' point at which budget targets would be met, with combinations of oil prices and exchange rates to the left of the line representing shortfalls from budget projections.

Obviously, we cannot move straight from the simple arithmetic presented in Table 2 to projections for the balance of payments or the budget deficit, as any change in the exchange rate or in world oil prices would have other, very significant, effects on the economy. A fall in the exchange rate, for instance, should act to increase world demand for Malaysia's manufactured exports and reduce Malaysian import demand. On the other hand, a fall in world oil prices could conceivably also increase demand for Malaysian manufactured exports but would tend to reduce world demand for Malaysia's third largest export - natural rubber - which competes on world markets with synthetic rubber, an oil derivative.

A further effect that a fall in the exchange rate would have - and one that has been widely noted by commentators - is to make the servicing of Malaysia's external debt more expensive, in Malaysian dollar terms. However, it seems doubtful that this could be a serious problem for the short term as the public sector's net new external borrowings at the current time still exceed interest payments on existing debt. As the previous AMM article explained, for the Federal Government net new borrowings exceeded interest payments by roughly M\$2 billion in 1984. Although Federal Government external interest payments could well become greater than net new borrowings in 1985, particularly if the budget deficit is reduced according to target (meaning that borrowings to finance the deficit would be lower), borrowings by the rest of the public sector are likely to remain fairly large. (In 1984, the Public Authorities' and Off-Budget Agencies' foreign borrowings totalled M\$3.4 billion.) Furthermore, under a scenario in which the exchange rate fell because of a fall in oil prices, other things being equal the budget deficit would rise, suggesting that foreign borrowings by the Federal Government might remain high. The main point is that, as long as capital inflows which result from foreign borrowing remain similar in magnitude to debt service payments, then a fall in the exchange rate need have no negative implications for liquidity and the economy, at least in the shorter-term.

As the figures in Table 2 indicate, if the oil price holds at current levels, the government faces no real problems with oil revenues at existing exchange rates, and the impact of the end-December oil production cut has been exaggerated by most observers of the Malaysian economy. Nevertheless, as explained in AMM Vol. 8 No. 5, the opposing economic forces of the deteriorating external debt service position on the one hand, and the improving trade balance on the other, are in fairly fine balance at the moment and the authorities have little policy flexibility if anything goes seriously awry. In 1984, the basic balance of payments was in surplus by M\$2.939 billion, comprising a current account deficit of M\$5.213 billion and a surplus on long-term capital of M\$8.152 billion. In 1985, the current account is expected to improve marginally to a deficit of M\$4.911 billion. However, the capital account surplus is comprised almost entirely of public sector net foreign borrowings, and these could be reduced by almost M\$2 billion if budget deficit targets were achieved. Thus, under budget assumptions, the overall balance of payments surplus might be not much over M\$1 billion in 1985. This, in turn, suggests (from Table 2) that a fall in oil prices below US\$25 per barrel could have important consequences for the balance of payments and liquidity, which would necessitate a policy response from the government.

MALAYSIA: CHART 3
MONEY, OUTPUT AND PRICES



What could the authorities do in the event of a sharp fall, or even a collapse, in oil prices? They would essentially have only two basic realistic policy options (not including monetising the budget deficit and allowing the exchange rate to collapse, which was essentially the course taken by the Philippines as the prices of its commodity exports fell):

1) They could simply borrow more abroad than they would have otherwise done. As Table 1 shows, a large proportion of oil export revenues (roughly 60%) ends up in government hands, in the form of Petroleum Income Tax, Royalties, Export Duties and payments of dividends by Petronas. Thus a large fall in oil export revenues would imply a large fall in Federal Government budget revenues as well. The government could thus simply maintain fiscal expenditures as planned and increase foreign borrowings to finance the now expanded budget deficit, in so doing maintaining the overall balance of payments in surplus. The problem with this option is that, although Malaysia's debt service ratio is still not in the league of major international debtors such as the Philippines, Malaysia's foreign debt has now risen to a point where interest payments have become a major negative on the balance of payments. To increase borrowings now would only exacerbate the problem and make the ultimate transition from borrowing to net debt repayment more painful for the economy.

2) Alternatively, the authorities could accept the loss of real income that the decline in the terms of trade implies. Under this policy option the government would have to further reduce budget expenditures, in line with the loss of revenue. The deterioration in the balance of payments would then put downward pressure on the exchange rate. The Central Bank could allow some depreciation of the exchange rate, but would let domestic monetary conditions tighten. Slower monetary growth would slow economic growth, reducing domestic absorption and eventually lead to an improvement in the balance of payments through reduced imports and improved international competitiveness in non-oil exports.

Clearly, for the longer-term health of the economy the second option would be preferable, and it seems likely that, given the government's concern with the rising international debt service burden, this is the direction the authorities would take in the event of a substantial decline in oil prices. Indeed, there is evidence that liquidity in Malaysia has already been tightening somewhat although this is too recent a development to show up clearly in money supply data available at the time of writing (see Chart 3).

FORECAST: Recent declines in oil prices and cutbacks in Malaysian crude oil production have not yet been serious enough to significantly affect, on their own, either the achievement of projections set out in the budget for 1985, or liquidity conditions and growth in the Malaysian economy. This is particularly so given that the recent depreciation of the Malaysian Ringgit offsets, in local currency terms, the potential loss of revenues from petroleum exports. However, with the international oil market still exhibiting signs of weakness (see AMM Vol. 8 No. 5), the possibility of further, major, declines in oil prices cannot be dismissed out of hand. A fall in the oil price below US\$25 per barrel could be expected to elicit a monetary and fiscal policy response from the Malaysian authorities, and a fall significantly below this level would have serious consequences for the economy. A large fall in oil prices would likely lead the government to cut back fiscal expenditures, and would also lead to a contraction in monetary growth with some depreciation of the exchange rate. Thus, a large fall in oil prices would necessarily involve a period of much slower growth in the Malaysian economy, but slower growth for the present would be preferable to the longer term consequences if the government attempted to offset the effects of lower oil prices by increasing further external borrowings, a course which the recent direction of fiscal policy suggests they would anyway be unlikely to take.

REPUBLIC OF KOREA

EMERGING FROM THE SQUEEZE

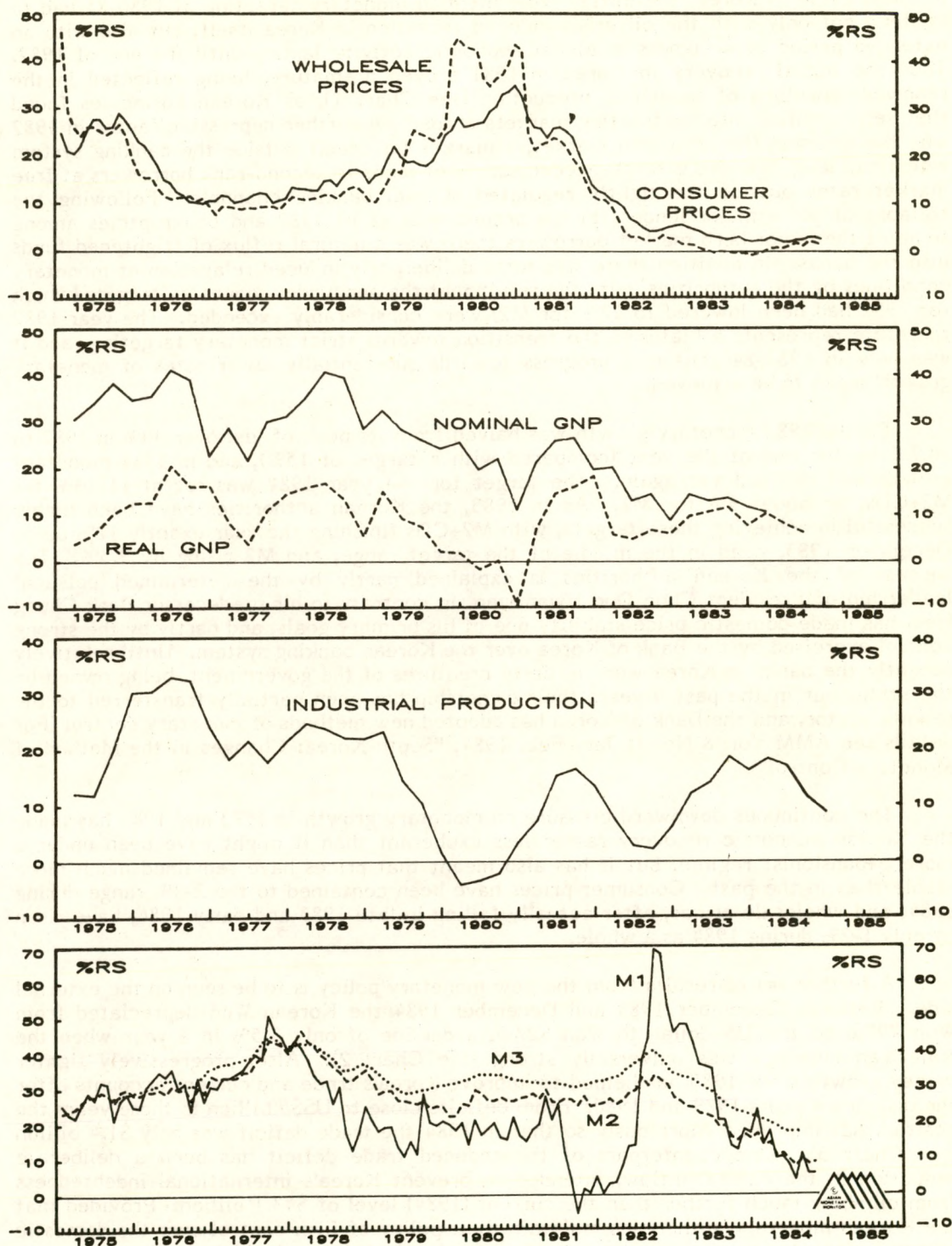
For the past two years the Korean authorities have imposed a progressive monetary squeeze. Now that the objectives of the squeeze have by and large been accomplished it will be feasible for the monetary authorities to ease up during 1985. Consequently conditions for economic activity and for stock market investment should be much more favourable this year than they have been for several years. Therefore, while foreign investors and bankers should be cautious in their expectations about liberalisation, they can look forward to a period of significantly easier liquidity during 1985 or 1986.

Starting in January 1980 Korea moved from a fixed exchange rate regime with monetary growth determined essentially by the balance of payments to a regime in which the exchange rate was managed within parameters that were consistent with the chosen monetary growth rate. In the first year of monetary targeting (1980), the monetary growth rate was planned to be 25% for M2, but the political resolution behind the targeting cannot be said to have been very strong as the actual growth rates soon crept up above the target, and the exchange rate for the Won against the US\$ was permitted to depreciate from 580.0 to 660.2 or by 12.1%. In all fairness 1980 was a difficult year to embark on a new experiment in monetary policy: first there had been 40% money growth rates in 1977-78 (see Chart 1), and second there was the second oil crisis of 1979-80 which led to a near quadrupling in the price of crude oil. Not surprisingly the economy slumped in 1980 - not because of the new policy of monetary control, but due to the emergence of the serious inflation which had been building up since the monetary explosion of 1977-78, and which was exacerbated by the devaluation of the Won in January 1980; the combination of the two caused an erosion of real purchasing power in the economy, precipitating the recession.

Through 1980 and 1981 the authorities kept monetary growth on a fairly even course with M2 remaining in the 25-30% range, and M3 in the 30-35% range. With the real economy in the doldrums in 1980 - industrial production declined by 1.8% and real GNP actually contracted by 5.2% - inflationary pressures eased quickly, and by 1981 there were signs of an incipient recovery (see AMM Vol. 5 No. 3, May-June 1981), both in industrial production and in real GNP.

At this point it is necessary to digress to explain some of the changes that were occurring in the Korean banking system and which caused the sharp downturn (in 1981) and the subsequent sharp upturn (in 1982) in the M1 statistics as measured. First, in July 1981 a new form of installment deposit was introduced, encouraging large transfers out of current or demand-type accounts in M1 to M2. These transfers continued until the second quarter of 1982 when notice deposits (in M2) were abolished, whereupon there was a marked shift back to demand deposits (in M1). Consequently the year-to-year changes in M1 are distorted downwards between the third quarter of 1981 and the second quarter of 1982, and similarly distorted upwards from the third quarter of 1982 to the second quarter of 1983. From a fundamental or conceptual point of view these shifts were not so much changes in what Korean holders of money considered to be money or transactions balances, but rather they were changes in the conditions applying to certain types of deposits which led to some major shifts between deposit categories. As can be seen from the more stable and essentially comparable behaviour of M2 and M3 throughout this period, the broader money aggregates remained unaffected. Now at last the M1 data are returning to normal and conforming to the behaviour of the other two aggregates.

SOUTH KOREA: CHART 1
MONEY, OUTPUT AND PRICES



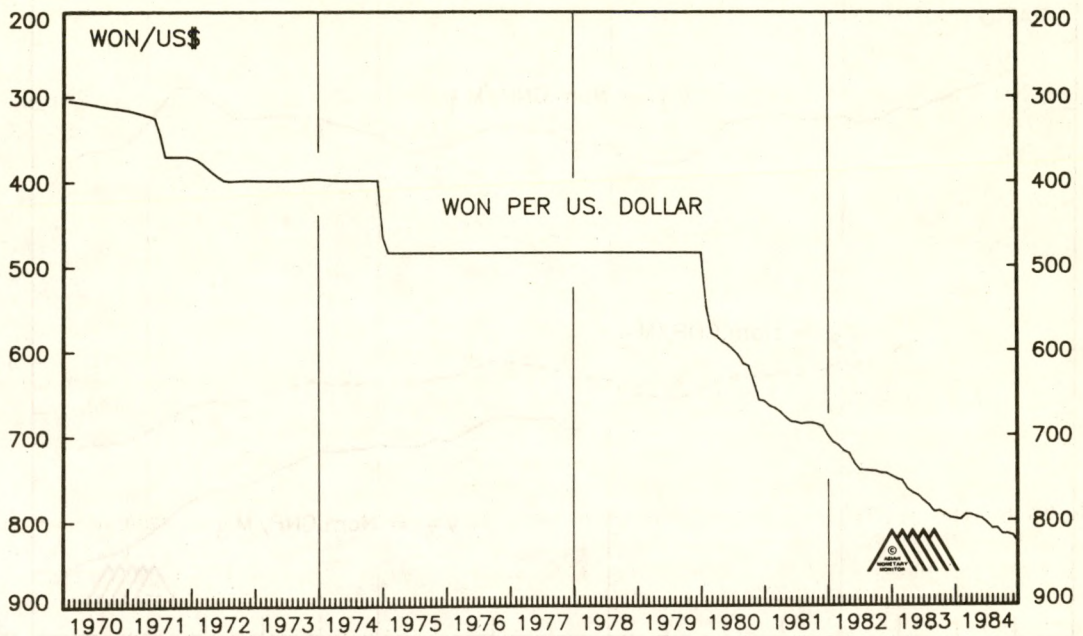
Reverting to the narrative of events forming the background to the current business cycle in Korea, the initial experiment in monetary targeting of 1980-81 had to contend not only with the oil crisis-induced recession in Korea itself, but also with an extended period of weakness in global economic activity lasting until the end of 1982. Thus the initial recovery in Korea in 1981 proved premature, being reflected in the renewed downturn of industrial production (see Chart 1), as Korean businesses found themselves selling into contracting markets abroad. A further depressing factor in 1982 was the crisis in the korb loan market, a market for credit outside the banking system which had long provided a much-needed supply of loans to second-rank borrowers at free market rates outside the tightly regulated official banking channels. Following the collapse of some major lenders in the second quarter of 1982 and bankruptcies among some of the major korb market borrowers there was a natural reflux of frightened funds into the banks. In addition there was some deliberately induced relaxation of monetary conditions by the authorities, with the result that the announced monetary targets (which for 1982 had been lowered to 22% for M2) were considerably exceeded. The year 1982 therefore represents a hiatus in the transition towards strict monetary targeting, and it was only in 1983-84 that real progress towards substantially lower rates of monetary growth began to be achieved.

During 1983 monetary growth was halved from its peak of just over 30% in 1982 to 14.7% by the end of the year (compared with a target of 15%), and in 1984 monetary growth was reduced yet again. The target for the year 1984 was set at 11-13% for M2+CDs, or about 9% for M2. As in 1983, the Korean authorities have been highly successful in achieving these targets, with M2+CDs finishing the year exactly 12% up on December 1983, dead in the middle of the target range, and M2 rising by 9.5%. The success of the Korean authorities is explained partly by the determined political leadership of President Chun Doo Hwan who, in contrast to his predecessor Park Chung Hee, has made domestic price stability one of his primary goals, and partly by the strong control exercised by the Bank of Korea over the Korean banking system. Until relatively recently the banks in Korea were entirely creatures of the government, being owned by the state, but in the past 5 years their ownership has been partially transferred to the private sector, and the Bank of Korea has adopted new methods of monetary control (For details see AMM Vol. 8 No. 1, Jan.-Feb. 1984, "South Korea: Changes in the Method of Monetary Control").

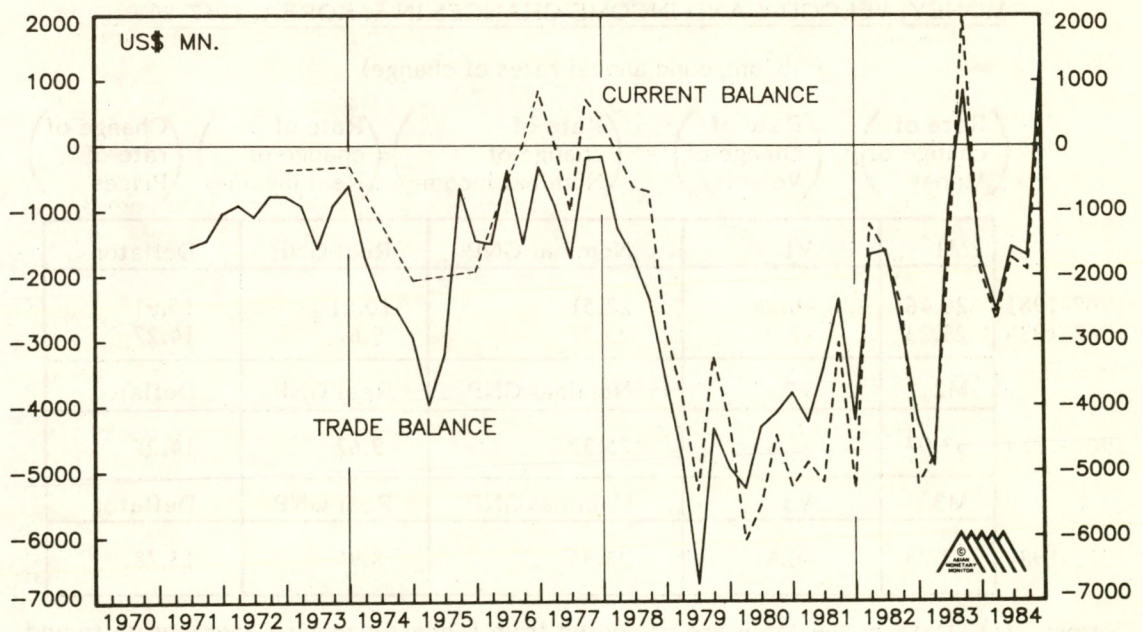
The continuous downward pressure on monetary growth in 1983 and 1984 has made the Korean economic recovery rather less exuberant than it might have been under a more expansionist regime, but it has also meant that prices have remained much more stable than in the past. Consumer prices have been contained to the 2-3% range during 1984, and wholesale prices, after actually falling in late 1983 and early 1984, have risen by only 1-2% during 1984 as a whole.

A further set of results from the new monetary policy is to be seen on the external side. Between December 1983 and December 1984 the Korean Won depreciated from Won 798.6 to the US dollar to Won 827.5, a decline of only 3.5% in a year when the American currency was universally strong (see Chart 2). Also, progressively tighter money growth since 1980 has helped to improve Korea's trade and current accounts after the disastrous years 1979 and 1980. From deficits close to US\$5 billion in those years the position has improved enormously so that in 1984 the trade deficit was only \$1.4 billion (see Chart 3). One counterpart of the reduced trade deficit has been a deliberate reduction in the capital inflow, intended to prevent Korea's international indebtedness from climbing much further than the current (1984) level of \$43.1 billion. Provided that the Korean monetary authorities maintain their policy of firm control over the domestic money aggregates so as to ensure an aggregate level of demand which is consistent with low inflation, the external accounts should not give any cause for undue anxiety in 1985.

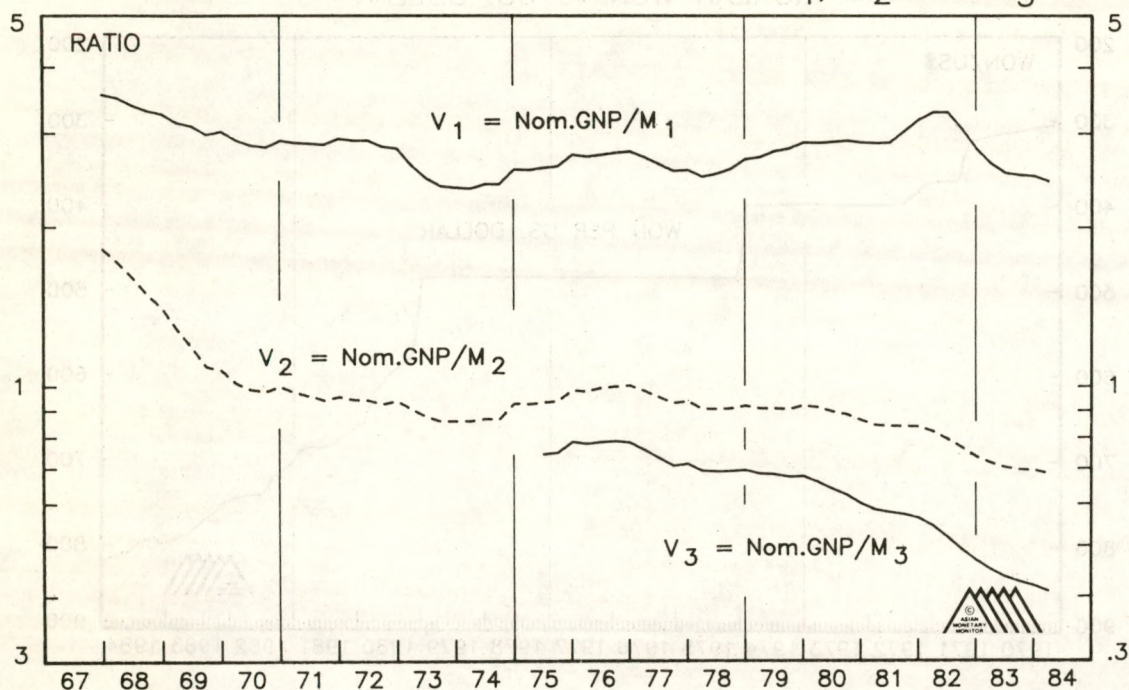
SOUTH KOREA: CHART 2
KOREAN WON vs US. DOLLAR



SOUTH KOREA: CHART 3
TRADE AND CURRENT BALANCE



SOUTH KOREA: CHART 4
INCOME VELOCITY OF CIRCULATION FOR M₁, M₂ AND M₃



NOTE: DATA ARE DERIVED FROM 4-QUARTER MOVING AVERAGES OF MONEY AND GNP

TABLE 1

MONEY, VELOCITY AND INCOME CHANGES IN S. KOREA, 1967-84

(Compound annual rates of change)

$$\left(\begin{array}{c} \text{Rate of} \\ \text{change of} \\ \text{Money} \end{array} \right) + \left(\begin{array}{c} \text{Rate of} \\ \text{change of} \\ \text{Velocity} \end{array} \right) = \left(\begin{array}{c} \text{Rate of} \\ \text{change of} \\ \text{Nominal Income} \end{array} \right) = \left(\begin{array}{c} \text{Rate of} \\ \text{change of} \\ \text{Real Income} \end{array} \right) + \left(\begin{array}{c} \text{Change of} \\ \text{rate of} \\ \text{Prices} \end{array} \right)$$

	M1	V1	Nominal GNP	Real GNP	Deflator
1967-1981	28.46	-0.74	27.51	10.01	15.91
1967-1984	28.23	-2.27	25.32	9.67	14.27
	M2	V2	Nominal GNP	Real GNP	Deflator
1967-1984	33.07	-5.83	25.32	9.67	14.27
	M3	V3	Nominal GNP	Real GNP	Deflator
1975-1984	32.73	-6.61	23.95	8.94	13.78

Notes: (1) Data in the table are computed from 4-quarter moving averages up to and including 1984 Q1.

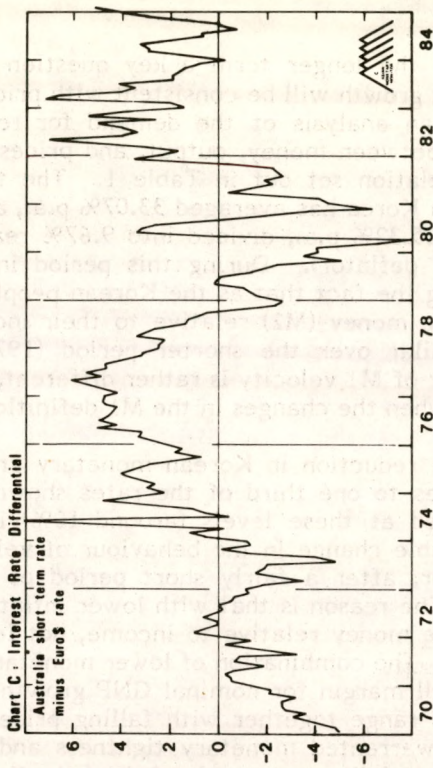
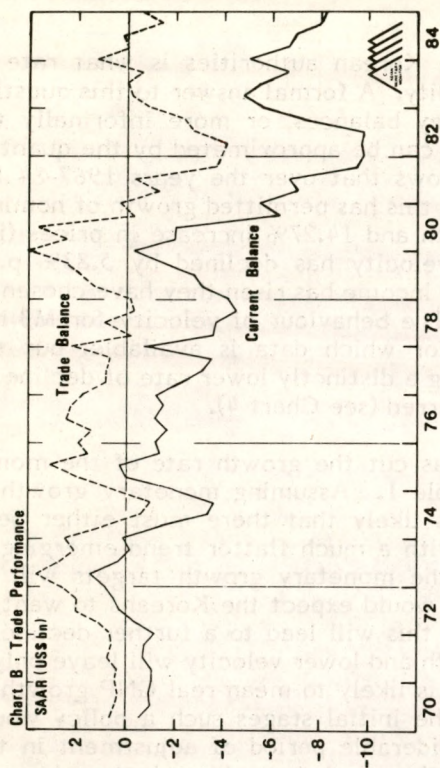
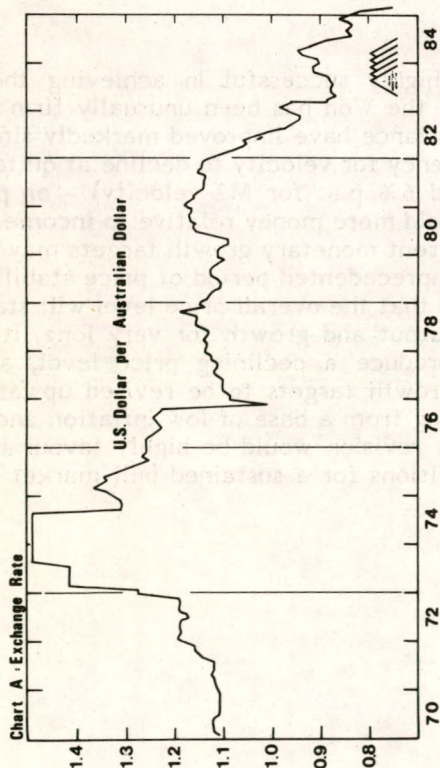
(2) Rates of change are compound annual rates. The underlying relationship is multiplicative not additive, hence in the first line of data $1.2846 \times 0.9926 = 1.2751 = 1.1001 \times 1.1591$ etc.

For the longer term a key question for the Korean authorities is what rate of monetary growth will be consistent with price stability. A formal answer to this question requires an analysis of the demand for real money balances, or more informally the relation between money, output, and prices, which can be approximated by the quantity theory relation set out in Table 1. The table shows that over the years 1967-84 M2 growth in Korea has averaged 33.07% p.a., and that this has permitted growth of nominal GNP of 25.32% p.a., divided into 9.67% real growth and 14.27% increase in prices (i.e. the GNP deflator). During this period income velocity has declined by 5.83% p.a., reflecting the fact that as the Korean people's real income has risen they have chosen to hold more money (M2) relative to their income. The behaviour of velocity for M3 has been similar over the shorter period (1975-84) for which data is available, but the behaviour of M1 velocity is rather different, showing a distinctly lower rate of decline up to 1981 when the changes in the M1 definitions occurred (see Chart 4).

The reduction in Korean monetary growth has cut the growth rate of the money aggregates to one third of the rates shown in Table 1. Assuming monetary growth is maintained at these levels (around 10%) it seems likely that there must either be a considerable change in the behaviour of velocity with a much flatter trend emerging in future, or, after a fairly short period of time, the monetary growth targets will be raised. The reason is that with lower inflation one would expect the Koreans to want to hold more money relative to income, not less, and this will lead to a further decline in velocity. The combination of lower monetary growth and lower velocity will leave only a very small margin for nominal GNP growth, which is likely to mean real GNP growth in the 7-9% range together with falling prices. In the initial stages such a policy would imply unwarranted monetary tightness and a considerable period of adjustment in the economy to falling prices. In view of the Korean authorities' strong historical preference for growth compared with price stability, and in the light of the improved performance both on the inflation front and on the external payments side even despite the relative strength of the Won, it seems likely that the current set of money growth targets will be modified sometime in the next year or so.

FORECAST: The Korean authorities have been highly successful in achieving their monetary growth targets in 1984. Inflation is low, the Won has been unusually firm on world money markets, and the trade and current balance have improved markedly since the crisis of 1979-80. However, in view of the tendency for velocity to decline at quite a rapid rate in Korea (2% p.a. for M1 velocity and 6% p.a. for M2 velocity) - or put differently, given the strong desire of Koreans to hold more money relative to income as their standard of living rises - it seems that the current monetary growth targets may be unduly restrictive. So far they have produced an unprecedented period of price stability in Korea, but if the policy is extended it is probable that the overall price level will start to decline. While this may not be damaging to output and growth for very long, it is unlikely that the Korean authorities intend to produce a declining price level, and consequently we would expect Korean monetary growth targets to be revised upwards during 1985 or at the end of 1985 for 1986. Starting from a base of low inflation and a much improved external payments position, such a revision would be highly favourable for domestic liquidity and should provide the conditions for a sustained bull market on the Seoul stock exchange.

AUSTRALIAN DOLLAR



The pronounced weakness in the Australian dollar so far this year reflects reduced investors' confidence in the conduct of financial policy in the economy. As in other economies where a policy of freely floating the exchange rate is pursued, the Australian monetary authorities had elected ostensibly to exercise direct control over the rate of growth of the domestic money supply. To this end, the Reserve Bank had announced a target of 8%-10% growth in M3 for the fiscal year ending June 1985. Throughout the first half of the target period, the growth in M3, as with the growth of the other key monetary aggregates, exceeded 10% and it was evident that the Reserve Bank needed to restrict policy in order that the target be achieved successfully. Instead, however, the Australian Treasurer, Mr. Keating, announced on January 30th that monetary targets in Australia were to be abandoned. In explaining his decision, the Treasurer emphasised alleged shortcomings in monetary targeting in a newly deregulated financial environment and argued that "excessive tightening" would be necessary if the target were to be attained.

In our previous note on the Australian dollar (AMM Vol. 8 No. 5) we cautioned that "Unless the Reserve Bank acts swiftly to subdue monetary growth confidence in the Australian economy and its currency will likely decline". Official monetary restraint was, and is, crucial to the stability of the Australian dollar because a) domestic inflationary expectations may have started to deteriorate after nearly three years of double digit monetary growth (Chart E) and b) the local currency is

particularly vulnerable to any reduction in the net private capital inflows necessary to "finance" Australia's enlarged current account deficit (Chart B). Prior to the Treasurer's announcement the Australian dollar was trading at US\$0.82 but it has plunged subsequently to a recent low of US\$0.6630.

Australia's substantial current account deficits, which now represent 6% of GNP, underline the poor competitiveness of both the Australian economy and the local currency. (The widely chronicled US current account deficit, by contrast, amounts to under 3% of US GNP.) It is instructive to compare the recent deterioration in the current account with that which occurred in 1981. Weakness in the current account in the former period can, to an extent, be attributed to recessionary conditions overseas - an observation which obviously did not hold in 1984 when both the US and Japanese economies grew strongly in real terms. Australia's poor current account performance last year is the result of weak competitiveness - exports to the US have risen barely at all over the last eighteen months - and a surge in imports: the value of imports rose 35% in the year to November 1984. There was also a further pronounced deterioration in the secular deficit on "invisibles" trading.

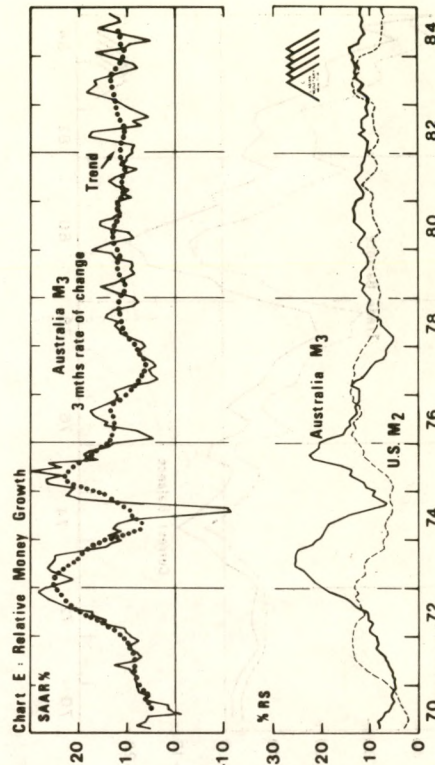
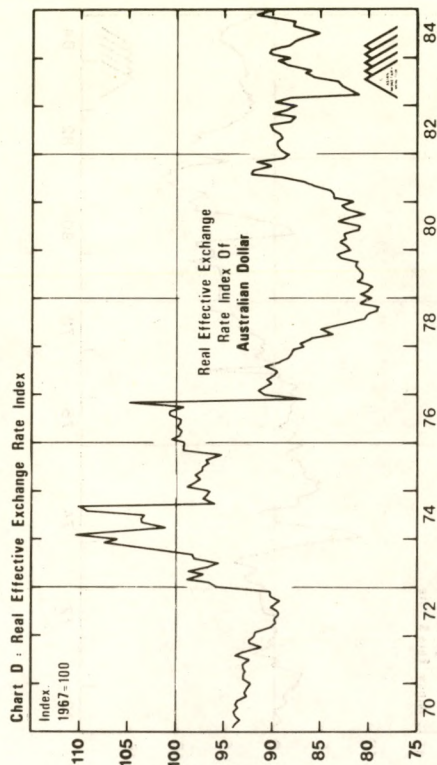
Although the Australian authorities have been comparatively successful in reducing domestic inflation, to an underlying level of around 6%, Australia's performance on this front has been relatively unfavourable in an international context. Moreover, Australian inflation is likely to record a cyclical rise during the second half of this year in response to excessive monetary growth during 1983 and 1984. The combination of a relatively high, and rising, inflation rate and a gaping current account deficit can only - unless the foreign exchange markets can be convinced that monetary restraint will shortly be reimposed - further undermine confidence in the Australian dollar. Investors should continue to regard the Australian dollar as a fundamentally weak currency.

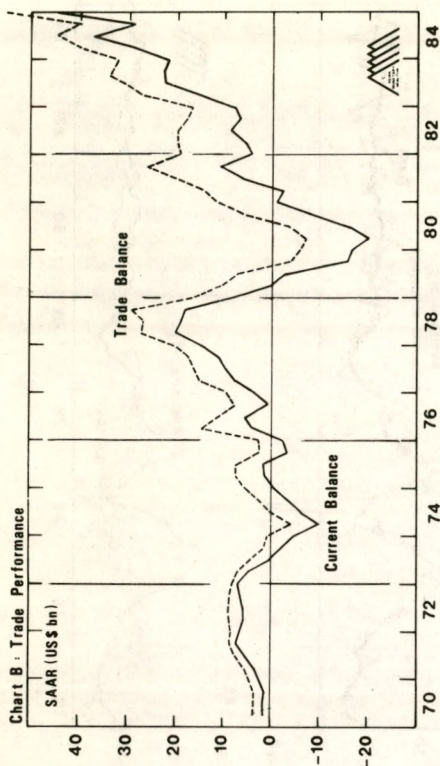
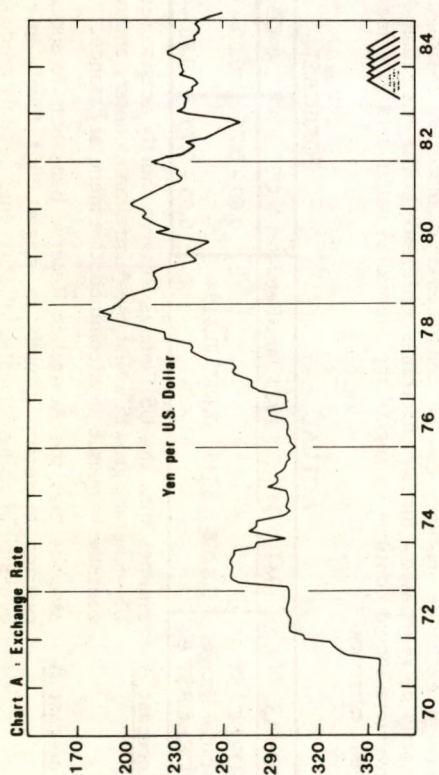
FORECAST

US\$/A\$	ACTUAL		FORECAST	
	1984	Q4	1985 Jan.-Feb.	Q3
FORECAST A				
Actual Range	0.8268-0.8645		0.6975-0.8194	0.50 - 0.65
FORECAST B				
			0.65 - 0.75	0.60 - 0.70

Forecast A assumes that the US Federal Reserve shortly acts to restrain US monetary growth whilst the Australian monetary authorities continue to pursue an accommodative monetary stance.

Forecast B assumes that the Australian Reserve Bank acts to successfully restrict monetary growth to single digit levels and that evidence of rising domestic inflation emerges only gradually.

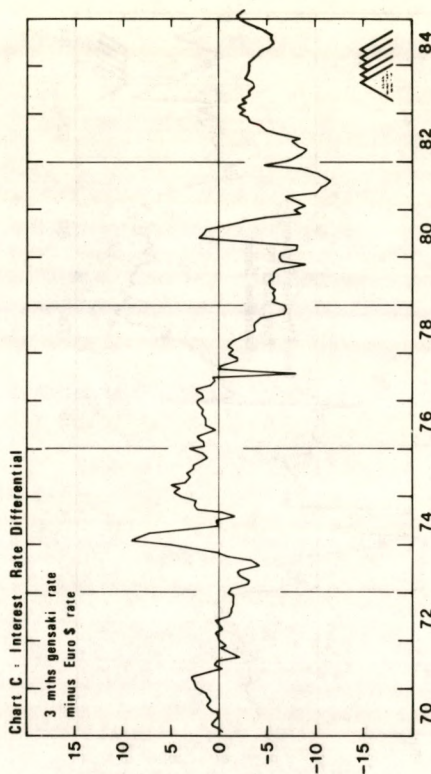




After trading in a comparatively narrow range throughout 1984 the yen has fallen by nearly 10%, to Yen263, against the US dollar since early November. This marks the weakest level for the yen-US dollar exchange rate in over two years. The yen trades currently at a very considerable discount to our estimated Purchasing Power Parity of Yen185-Yen200.

The "undervaluation" of the yen relative to its long run Purchasing Power Parity with the US dollar is reflected in Japan's very large trade and current account surpluses (Chart B). During 1984, Japan recorded a current account surplus of US\$35.02 billion, rising from US\$20.80 billion in 1983. A substantial increase in Japan's bilateral trade surplus with the US, which measured US\$36 billion in 1984, accounted predominantly for the improved current account position.

The fact that the yen has weakened against the dollar in the face of an enlarged current account surplus proves that it is the former which has been partly responsible for the surplus in Japan's trade in goods and services. (Strong growth in the domestic US economy has also been a key contributory influence.) The yen, in turn, has been weakened versus the US dollar by sustained net capital outflows from Japan. Therefore, the line of causality has run; first, Japanese residents have increased their net claims on overseas economies in response to enhanced perceived real rates of return abroad, second, this increased capital outflow has not been offset instantaneously by



an improvement in the current account with the result that the yen has been weakened until, third, the surplus on the current account has been enlarged. So long as Japanese residents continue to diversify their wealth overseas, the countervailing surpluses on Japan's current account are unlikely to be of the form which will lead to a strengthening yen against the US dollar.

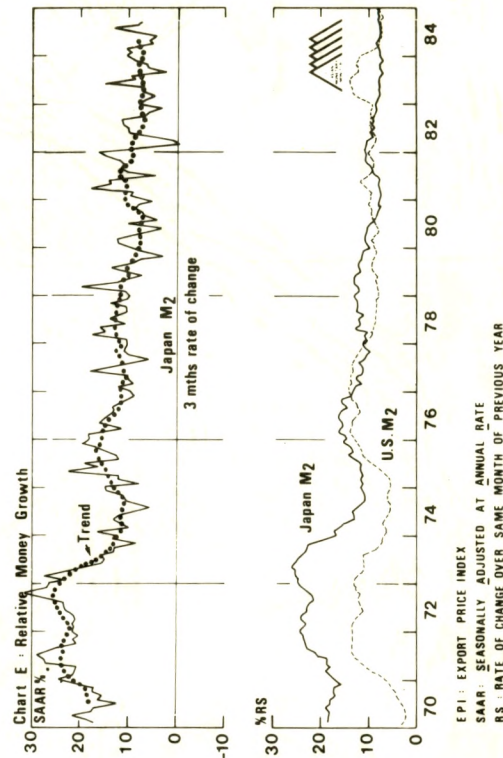
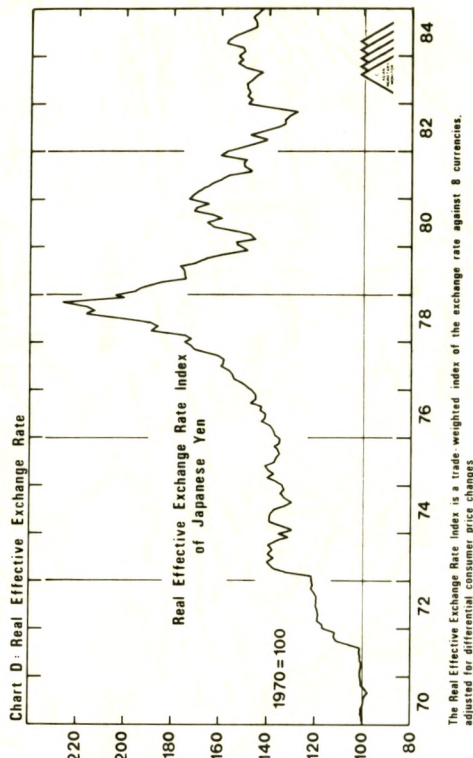
In balance of payments terms, the yen's disappointing performance over the last year is the result of a surge in net long term capital outflows amounting to US\$49.83 billion, after US\$17.70 billion in 1983. Gross long term capital outflows soared to US\$56.92 billion, rising from US\$32.46 billion in 1983, whilst gross inflows halved to US\$7.09 billion. These large adjustments on both the asset and the liability sides of the long term capital account reflect mainly changes in the Securities Account. Japanese residents' net purchases of overseas securities virtually doubled to US\$30.81 billion in 1984 (This was entirely due to increased net investment in foreign fixed income securities) whilst foreigners were actually net sellers of Japanese domestic securities (for the first time in two decades) after net purchases amounting to US\$8.49 billion in 1983.

In theory, there may be limits to the extent to which Japanese residents will voluntarily increase their claims on overseas economies, but whilst US real interest rates remain high and inflation low there is little reason to think that these limits vis-a-vis the US economy and the US dollar will soon be reached. In particular, with US monetary growth currently above target and the likelihood that the US economy will remain comparatively firm investors should anticipate that the US authorities will begin to enforce a more restrictive monetary policy over the next several months. This will raise US short rates somewhat whilst leading to a further improvement in inflationary expectations. In this environment, and where Japanese monetary policy is likely to be unchanged, the yen may weaken further against the dollar.

Yen/US\$	ACTUAL		FORECAST	
	1984 Q4	1985 Jan.-Feb.	1985 Q2	Q3
FORECAST A			255 - 275	265 - 285
Actual Range	239.98-251.55	251.80-262.90		
FORECAST B			250 - 270	250 - 270

Forecast A assumes no change in Japanese monetary policy over the coming months and that the US Federal Reserve shortly tightens monetary policy in order to restrain US monetary growth.

Forecast B assumes no change in either Japanese or US monetary policy over the next several months.





ASIAN MONETARY MONITOR

is published by
Asian Monetary Monitor Ltd.,
P.O. Box 30724, Causeway Bay,
Hong Kong.



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Asian Monetary Monitor is a bimonthly publication specialising in the analysis of economies along the Asian Pacific Rim. Sold by subscription only, price US\$200 p.a. inclusive of air mail delivery to any part of the world. Correspondence and subscriptions should be addressed to The Editor, Asian Monetary Monitor Ltd., P. O. Box 30724, Causeway Bay, Hong Kong.

EDITOR:

John G. Greenwood
M.A. (Hons) Econ. Edinburgh
Research Economist, University of Tokyo
Economist at G.T. Management (Asia) Ltd.

**CONTRIBUTING
EDITORS:**

Hugh P. Sloane
B.A. Econ. Bristol
M. Phil. Econ. Oxford
Economist at G.T. Management (Asia) Ltd.

Tim J. Lee
B.A. Econ. Cambridge
Economist at G.T. Management (Asia) Ltd.

**CHARTS AND
STATISTICS:**

S.Y. Chan
Michael Wong

ADMINISTRATION:

Isabella Ling

Asian Monetary Monitor is published in
association with the  group of companies

ASIAN MONETARY MONITOR

March-April 1985

Vol. 9 No. 2

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KEY TO SYMBOLS USED IN THE CHARTS

% RP - Percentage Rate of change over Preceding period.

% RS - Percentage Rate of change over Same period of
preceding year.

SA - Seasonally Adjusted.

SAAR - Seasonally Adjusted at Annualised Rate.

THE YEN - DOLLAR EXCHANGE RATE AND COMPLEMENTARY DEVELOPMENTS IN THE JAPANESE AND U.S. ECONOMIES

The balance sheet and flow of funds identities that are used commonly in the analysis of a single economy are relevant also to any examination of trends in the international economy. Thus, for example, the trade and capital account transactions of a particular economy are not only counterparts on that country's balance of payments but they also have counterpart items in the balance of payments of foreign economies.

The substantial surpluses earned on Japanese current account transactions and the US current account deficit are examples of counter-vailing flows in the international economy. In 1981, Japan's current account surplus amounted to US\$4.7 billion, or less than half a percent of total GNP (see Chart 1) whilst the US enjoyed a small recorded surplus on current account (Chart 2). Over the last two years however Japan's current account has been a substantial beneficiary of the decline in net exports from the US rising to a surplus of US\$35 billion, or 3% of national income as the US current account position plunged to a deficit of US\$101 billion in 1984.

Charts 3 and 4 underline the extent to which the vast improvement in Japan's overall current account surplus since 1982 has been dominated by an increase in Japan's bilateral surplus with the US. Since the end of 1982 Japan's gross exports to the US have soared some 90%, to US\$60 billion, at an annual rate, during the fourth quarter of 1984 (Customs clearance data). Japanese exports to the US, as a proportion of total exports, had been comparatively stable at around 25% during the 1976-1982 period. In the last two years, however, Japanese exports to the US have surged to more than one third of total exports. Over the period, Japanese imports from the US have declined from US\$24.6 billion to US\$21.9 billion. Japan's trade account surplus with the US has thus risen from US\$12 billion in 1982 to US\$38 billion (Customs clearance data). It is evident from Chart 4 that in 1984 both the increment to and the absolute level of Japan's trade surplus were virtually entirely the result of a larger bilateral surplus with the US.

Japan's trade surplus with the US has increased during a period when the yen has been steady to weaker against the US dollar. (The yen has depreciated from an average of Yen235.74 during the first quarter of 1983 to Yen246.02 in the final quarter of 1984. Throughout the period we estimate that the yen was 15%-25% "undervalued" against the dollar when assessed from the perspective of Purchasing Power Parity indicators.) This suggests strongly that it has been the yen's weakness against the dollar which has been mainly responsible for generating Japan's large external surpluses. In turn, this implies that the relative undervaluation of the yen - when assessed in terms of Japan's competitiveness in its trade and goods and services - and the overvaluation of the US dollar have arisen mainly as a result of capital account transactions on the two economies' balance of payments.

It is evident that the outflows of long term capital, which have amounted to US\$67.5 billion over the last two years, from the surpluses earned by Japan are, in an accounting sense, a counterpart to the net capital inflows to the dollar. However, the relationship between the yen and the dollar, and through them to the Japanese and American economies is far more than a mere accounting identity. Precisely because a deficit on US current account as a result of imports from Japan has not led to an appreciation in the yen/US dollar exchange rate so there have been far reaching implications for the structure of real growth in the two economies.

CHART 1

JAPAN: THE CURRENT ACCOUNT AS A PROPORTION OF GNP

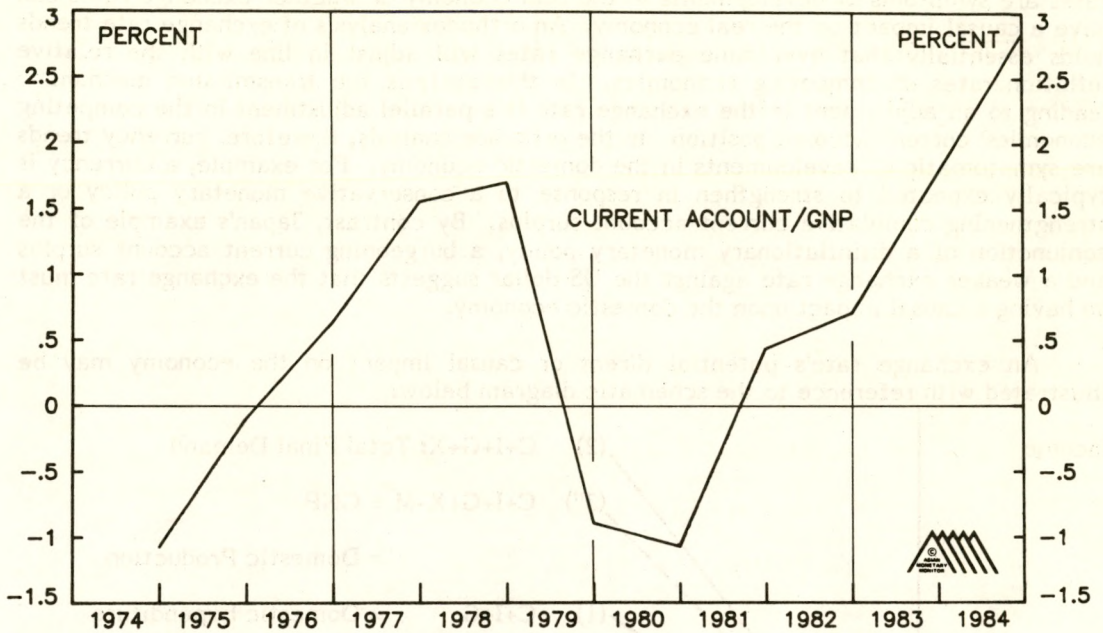
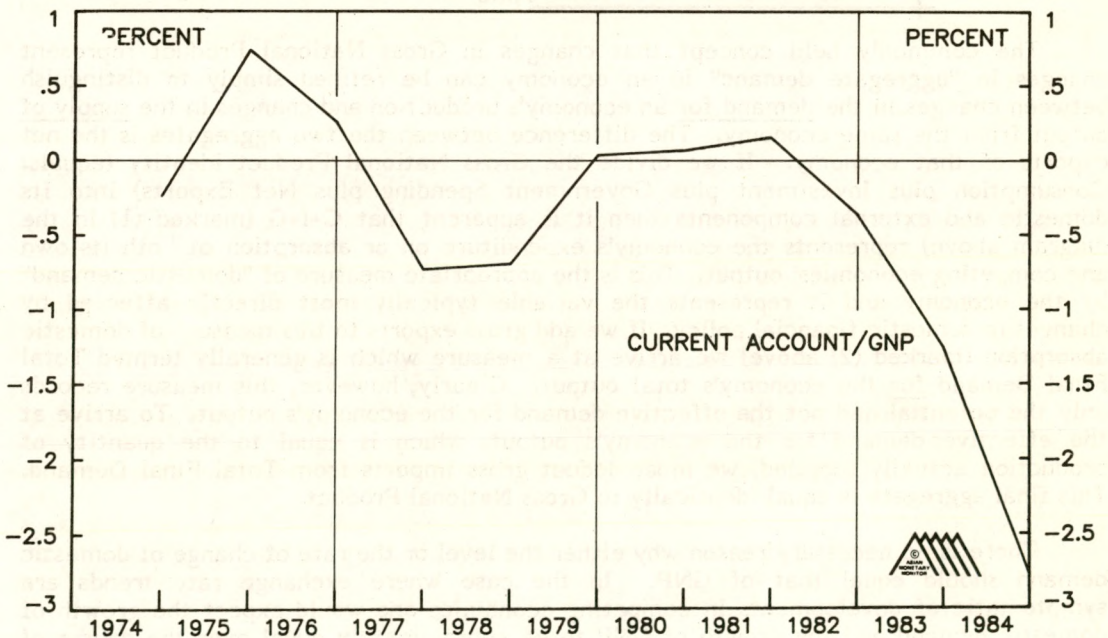


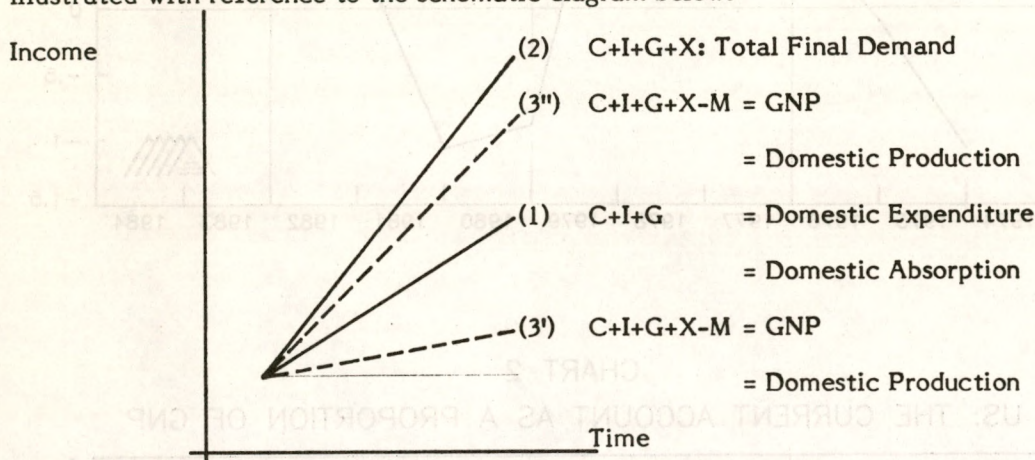
CHART 2

US: THE CURRENT ACCOUNT AS A PROPORTION OF GNP



The theoretical issue illustrated here is the extent to which international exchange rates are symptoms of developments in the real economy or whether exchange rates can have a causal impact on the real economy. An orthodox analysis of exchange rate trends holds essentially that over time exchange rates will adjust in line with the relative inflation rates of competing economies. In this analysis the transmission mechanism leading to an adjustment in the exchange rate is a parallel adjustment in the competing economies' current account position. In the orthodox analysis, therefore, currency trends are symptomatic of developments in the domestic economy. For example, a currency is typically expected to strengthen in response to a conservative monetary policy or a strengthening cumulative current account surplus. By contrast, Japan's example of the conjunction of a disinflationary monetary policy, a burgeoning current account surplus and a weaker exchange rate against the US dollar suggests that the exchange rate must be having a causal impact upon the domestic economy.

An exchange rate's potential direct or causal impact on the economy may be illustrated with reference to the schematic diagram below:



The commonly held concept that changes in Gross National Product represent changes in "aggregate demand" in an economy can be refined simply to distinguish between changes in the demand for an economy's production and changes in the supply of output from the same economy. The difference between the two aggregates is the net exports of that economy. If we divide the Gross National Product identity (equals: Consumption plus Investment plus Government Spending plus Net Exports) into its domestic and external components then it is apparent that $C+I+G$ (marked (1) in the diagram above) represents the economy's expenditure on or absorption of both its own and competing economies' output. This is the appropriate measure of "domestic demand" by the economy and it represents the variable typically most directly affected by changes in domestic financial policy. If we add gross exports to this measure of domestic absorption (marked (2) above) we arrive at a measure which is generally termed Total Final Demand for the economy's total output. Clearly, however, this measure records only the potential and not the effective demand for the economy's output. To arrive at the effective demand for the economy's output, which is equal to the quantity of production actually supplied, we must deduct gross imports from Total Final Demand. This final aggregate is equal identically to Gross National Product.

There is no necessary reason why either the level or the rate of change of domestic demand should equal that of GNP. In the case where exchange rate trends are symptomatic of developments in competing economies one would expect the growth of domestic demand and the growth of GNP to be approximately equal over the course of the business cycle: an increase in an economy's net exports would tend to raise simultaneously the growth of GNP relative to the growth of domestic demand and the external value of the currency until the exchange rate became "overvalued", encouraging a contraction in GNP relative to final demand and a weaker currency.

CHART 3
JAPAN: JAPAN'S EXPORT PERFORMANCE

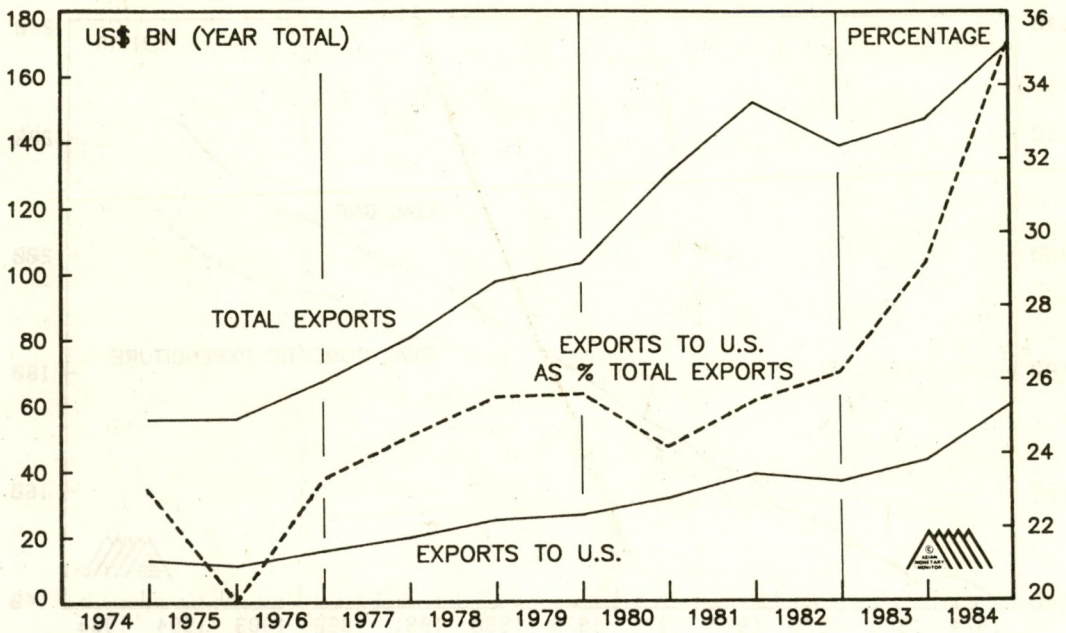


CHART 4
JAPAN: JAPAN-US TRADE

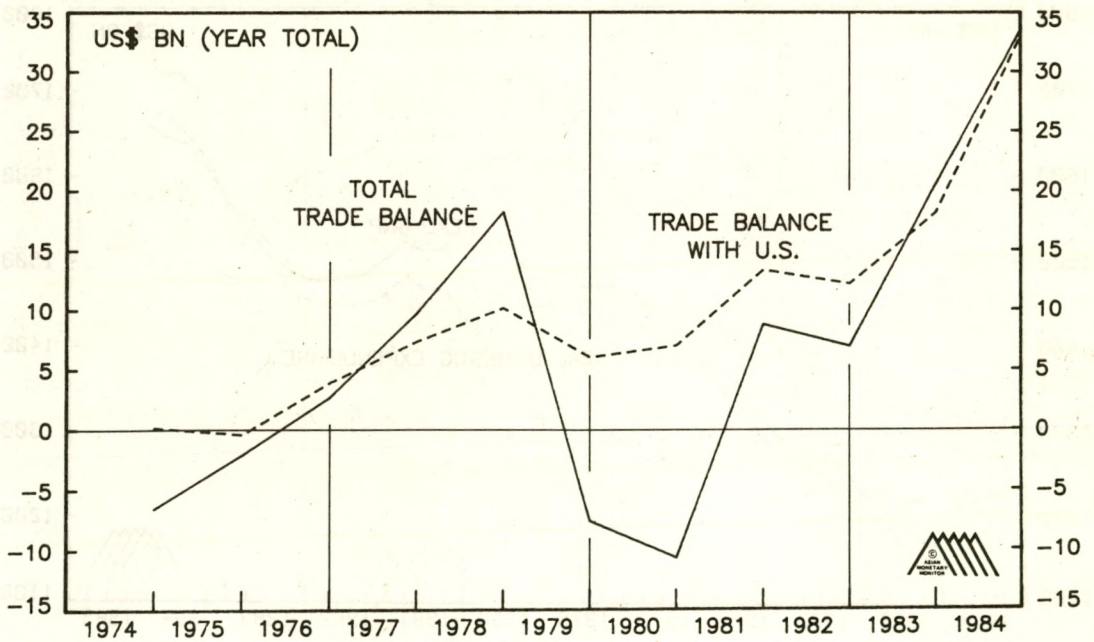


CHART 5
JAPAN: REAL GNP AND DOMESTIC EXPENDITURE

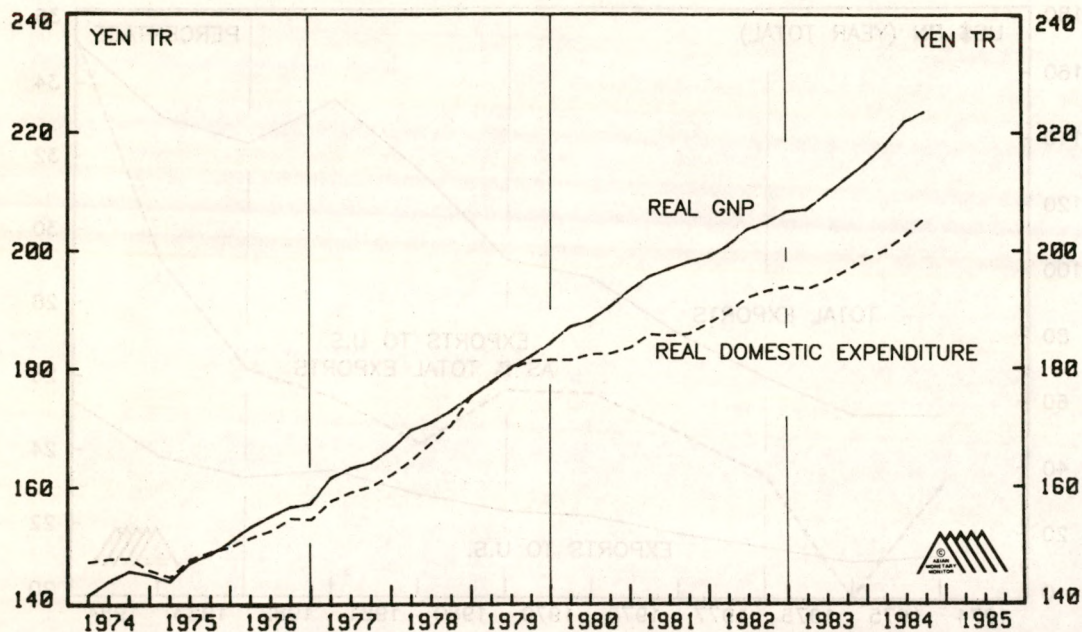


CHART 6
US: REAL GNP AND DOMESTIC EXPENDITURE

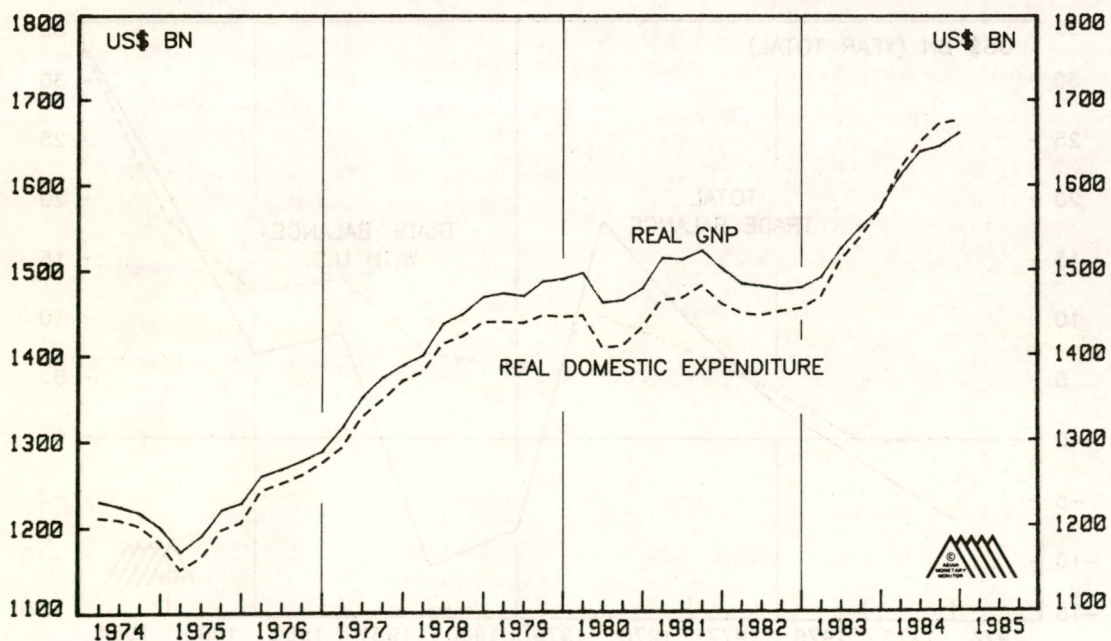


CHART 7
JAPAN: GROWTH RATES OF REAL GNP AND DOMESTIC EXPENDITURE

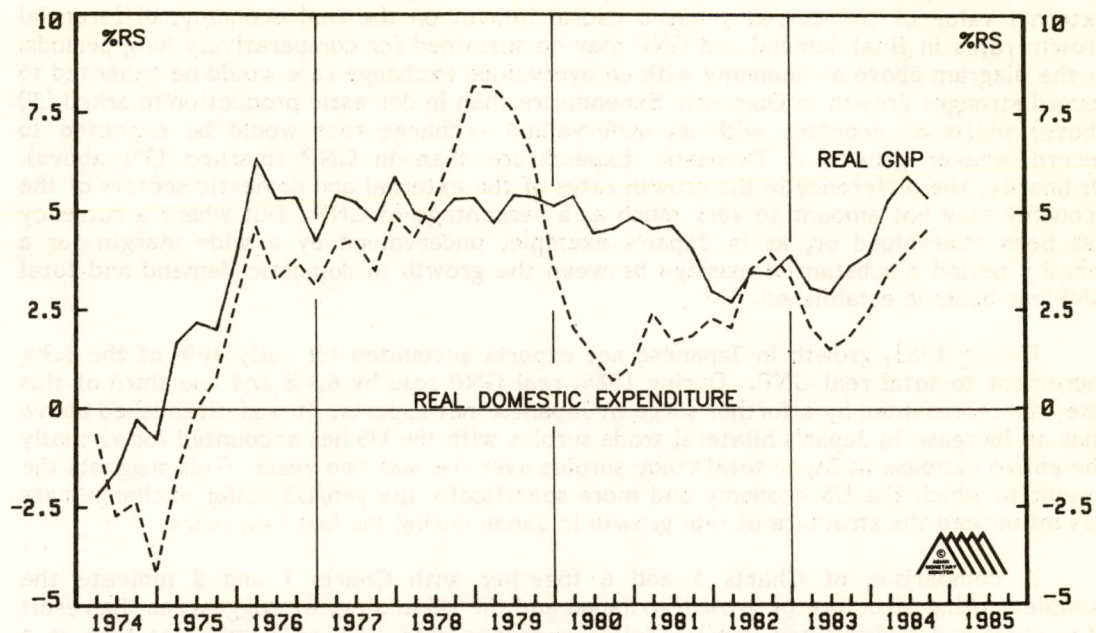
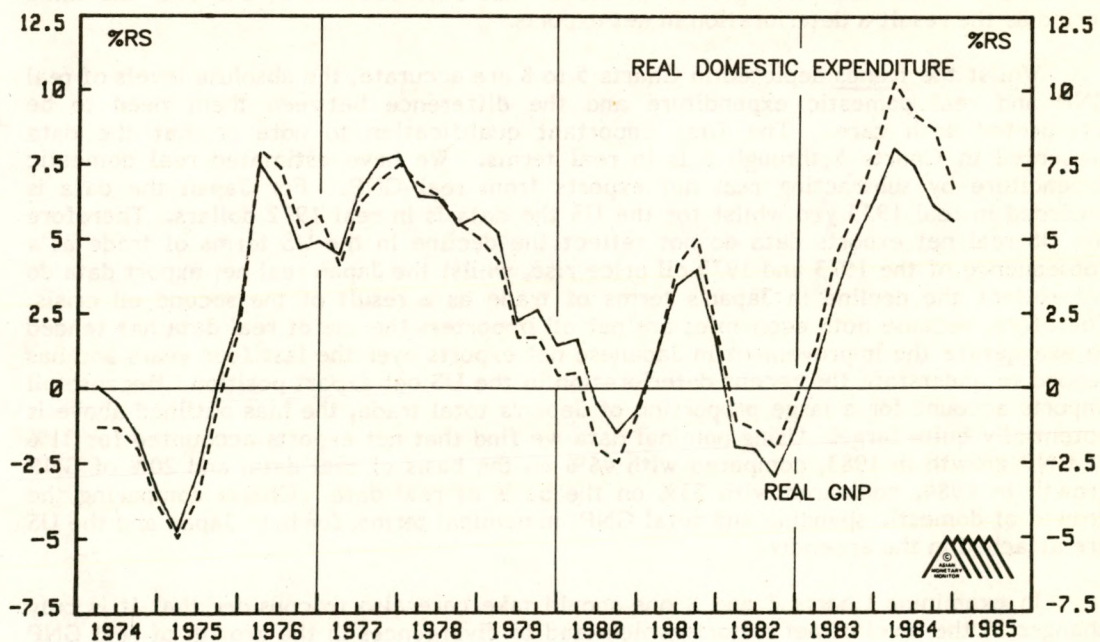


CHART 8
US: GROWTH RATES OF REAL GNP AND DOMESTIC EXPENDITURE



However, whenever, as has proved the case in the yen/US dollar exchange rate, the external value of the currency has a causal impact on the real economy, differential growth rates in final demand and GNP may be sustained for comparatively long periods. In the diagram above an economy with an overvalued exchange rate would be expected to record stronger growth in Domestic Expenditure than in domestic production (marked (3') above) whilst an economy with an undervalued exchange rate would be expected to record weaker growth in Domestic Expenditure than in GNP (marked (3'') above). Ordinarily, the difference in the growth rates of the external and domestic sectors of the economy may not amount to very much as a percentage of GNP. But where a currency has been overvalued or, as in Japan's example, undervalued by a wide margin for a lengthy period a substantial average between the growth in domestic demand and total GNP can become established.

During 1983, growth in Japanese net exports accounted for fully 46% of the 3.9% increment to total real GNP. During 1984, real GNP rose by 6.4% and one third of this rise was represented by a further surge in Japanese net exports. It was established above that an increase in Japan's bilateral trade surplus with the US has accounted for virtually the entire increase in Japan total trade surplus over the last two years. This suggests the extent to which the US economy and more specifically the yen/US dollar exchange rate has influenced the structure of real growth in Japan during the last two years.

A comparison of Charts 5 and 6 together with Charts 7 and 8 indicate the complementing structure of growth in Japan and the US arising, we suggest, as the result of a sustained undervalued yen/US dollar exchange rate. Chart 5 indicates that as a consequence of an improvement in Japan's real net export position, real GNP in Japan is now some twenty trillion yen or approximately 10% higher than real domestic expenditure. Conversely, real domestic expenditure (i.e. real consumption plus real investment plus real government spending) in the US had increased by some US\$60 billion more than real GNP since mid 1980. Chart 7 illustrates how Japanese real GNP has been boosted by a cumulative 6.6% since the end of 1980 as a result of an improvement in real net exports whilst real GNP growth in the US has been reduced by 5% over the same period as the result a deterioration in net exports.

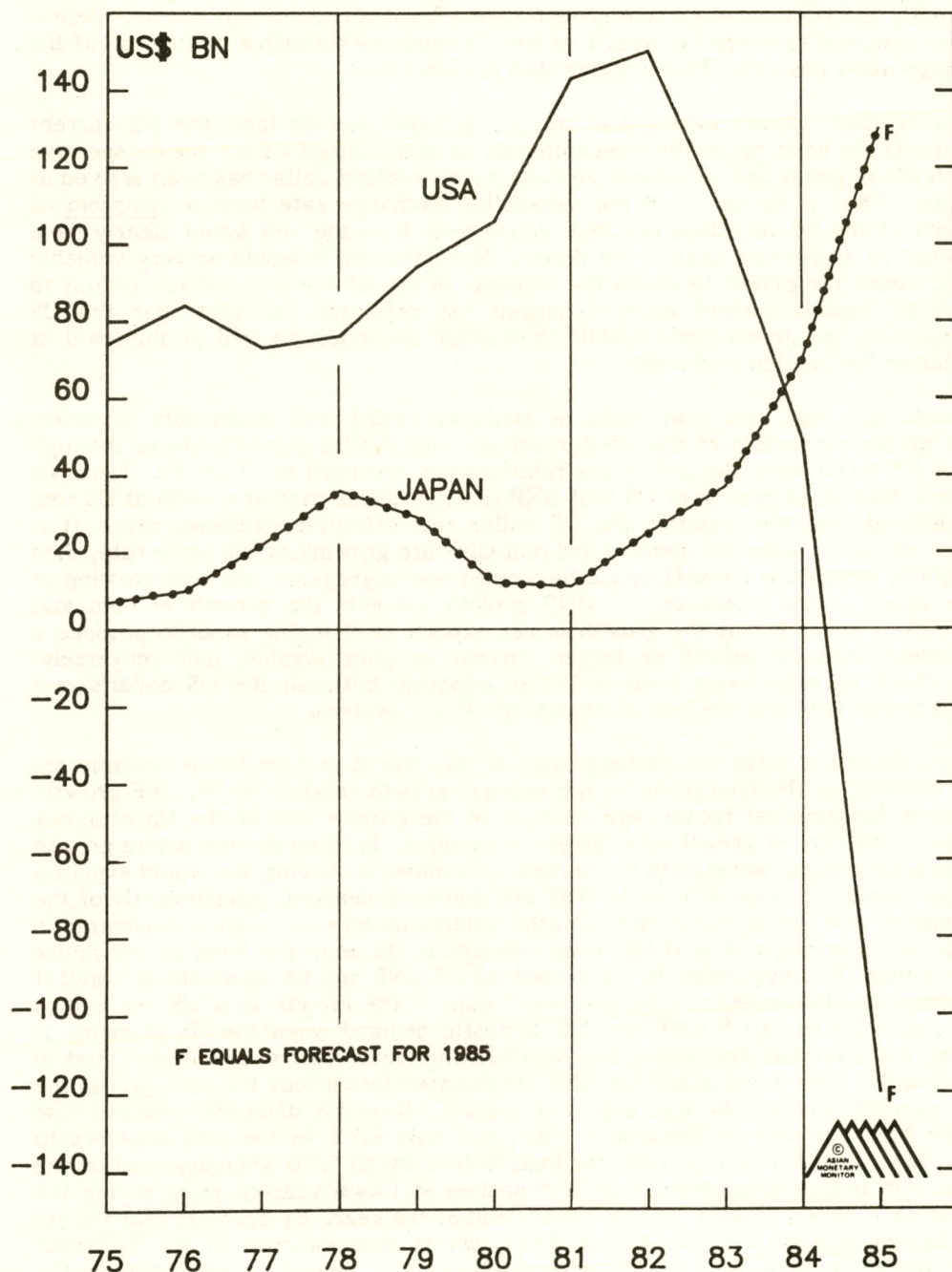
Whilst the trends depicted in Charts 5 to 8 are accurate, the absolute levels of real GNP and real domestic expenditure and the difference between them need to be interpreted with care. The first important qualification to note is that the data presented in Charts 5 through 8 is in real terms. We have estimated real domestic expenditure by subtracting real net exports from real GNP. For Japan the data is recorded in real 1975 yen whilst for the US the data is in real 1972 dollars. Therefore the US real net exports data do not reflect the decline in the US terms of trade as a consequence of the 1973 and 1979 oil price rise, whilst the Japan real net export data do not reflect the decline in Japan's terms of trade as a result of the second oil crisis. Therefore, because both economies are net oil importers the use of real data has tended to exaggerate the improvement in Japanese net exports over the last four years and has tended to understate the recent deterioration in the US net export position. Because oil imports account for a large proportion of Japan's total trade, the bias outlined above is potentially quite large. Using nominal data we find that net exports accounted for 31% of GNP growth in 1983, compared with 46% on the basis of real data, and 20% of GNP growth in 1984, compared with 33% on the basis of real data. Charts comparing the growth of domestic spending and total GNP, in nominal terms, for both Japan and the US are attached in the appendix.

In examining Charts 7 and 8 one should take care also to consider that it is only changes in the level of net exports which lead to divergences in the growth of real GNP and domestic expenditure. This implies that the impact of an overvalued or undervalued exchange rate can be divided between income and wealth effects. To illustrate, as the

CHART 9

THE US AND JAPAN: DEBTOR AND CREDITOR NATIONS

NET ASSETS OF US AND JAPANESE RESIDENTS HELD ABROAD



SOURCE: "SURVEY OF CURRENT BUSINESS" MINISTRY OF FINANCE, JAPAN

US current account position has deteriorated from rough balance in 1982 to a US\$100 billion deficit in 1984 this has detracted from real GNP growth in that economy. However, if the current account deficit is now maintained at US\$100 billion it need not impact directly the US economy's real growth rate. A sustained current account deficit will however continue to erode the wealth of the US economy through a diminution of the US net foreign asset position. This is illustrated in Chart 9.

The view that Japan's substantial current account surplus (and the US current account deficit) has been caused by predominantly an undervalued - from the perspective of Japan's trade in goods and services - yen and an overvalued dollar has been arrived at by induction. That is to say, had the yen-dollar exchange rate been a symptom of developments in the US and Japanese real economies, then the yen would clearly have been expected to appreciate against the dollar. Nevertheless, it would be very valuable if one could assess the extent to which the increase in the US current account deficit to the benefit of Japan's current account surplus has reflected the fact that the US domestic economy has grown more rapidly than other countries, as well as the level of the US dollar on the foreign exchanges.

It turns out that one can make a straightforward and reasonably accurate assessment of the proportion of the US current account deficit attributable to the high level of the US dollar with the aid of the relationships recorded in Chart 10. Here we have outlined the rate of growth of US real GNP relative to the rate of growth of US real domestic demand, and the trend in the US dollar real effective exchange rate. It is evident that whenever domestic demand and real GNP are growing at the same rate, then US net exports, which are the difference between these aggregates, are also growing at that same rate. Thus whenever US GNP growth exceeds the growth in domestic expenditure it is evident that the growth in net exports is changing so as to produce a smaller current account deficit or larger current account surplus, and conversely. Therefore Chart 10 effectively records the relationship between the US dollar's real effective exchange rate and the rate of change of US net exports.

In fact, the dollar effective exchange rate is only one of at least three fundamental influences influencing the change in US net exports growth relative to US GNP growth. The two other fundamental factors are changes in the growth rate of the US economy and changes in the rate of growth of overseas economies. In those periods where growth in the US is accelerating and growth in overseas economies is slowing one would expect a US net export deficit to rise relative to GNP and domestic demand, independently of the external value of the dollar. Thus, although the notable inverse correlation illustrated in Chart 10 suggests strongly that it has been changes in the external level of the dollar which have caused the divergence in the growth of US GNP and US domestic demand, it does not prove it. However, just as one would expect the growth in a US net export deficit to rise relative to US GNP and US domestic demand when the US economy is accelerating and overseas economies are decelerating, so is the reverse true. And in 1984 growth in US final demand and US GNP decelerated throughout the year, whilst the growth in overseas economies typically accelerated. Real US domestic demand rose 8.0% in the four quarters to December 1983, but only 6.7% in the four quarters to December 1984. Real US GNP growth declined from 6.3% to 5.7% when assessed on the same basis. US industrial production growth peaked at 15.4% year-on-year, during the first quarter of 1984 but slowed to 5.4% by the end of the year. By contrast real growth in Japan firmed in 1984 compared with 1983, whilst real incomes in the European Economic Community rose 3.5% in 1984 after 2.6% in 1983. Therefore, we conclude, the increase in US domestic demand relative to US real GNP during 1984 reflects the impact of a strong and rising dollar on the foreign exchange.

CHART 10
US: REAL GNP AND DOMESTIC EXPENDITURE GROWTH
AND THE DOLLAR'S REAL EFFECTIVE EXCHANGE RATE

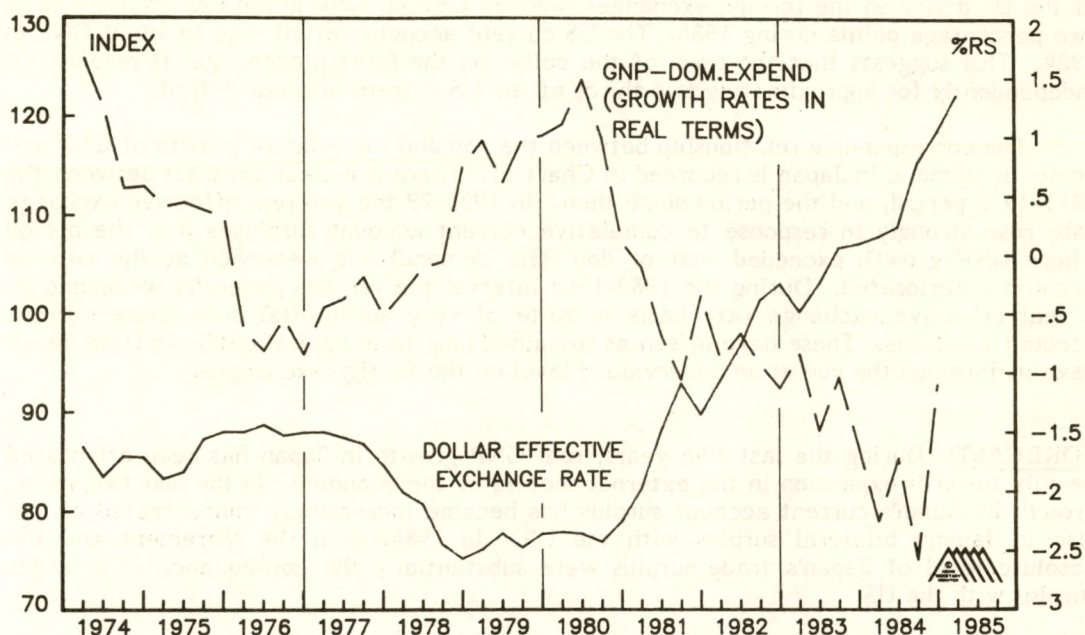
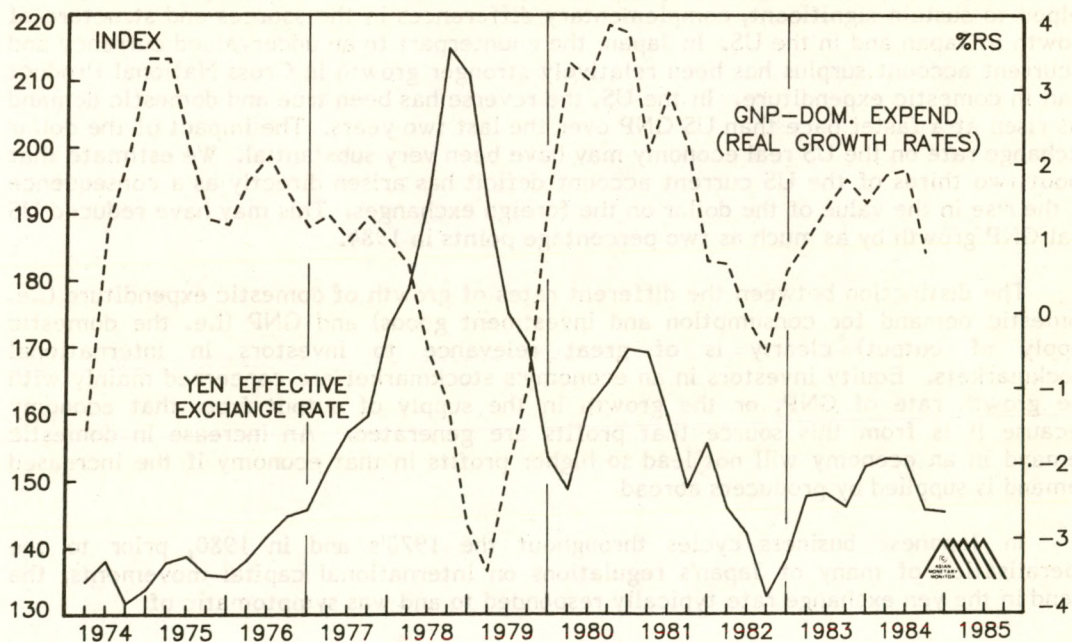


CHART 11
JAPAN: REAL GNP AND DOMESTIC EXPENDITURE GROWTH
AND THE YEN'S REAL EFFECTIVE EXCHANGE RATE



This conclusion is important because of the size of the difference between US GNP and domestic demand during 1984. The evidence in Chart 10 suggests that the strength of the US dollar on the foreign exchanges reduced US real GNP growth by an average of two percentage points during 1984. The US current account deficit rose to 3% of GNP in 1984. This suggests that the level of the dollar on the foreign exchanges is responsible independently for approximately two thirds of the US current account deficit.

The corresponding relationship between the yen and the relative growth of GNP and domestic demand in Japan is recorded in Chart 11. There is a clear contrast between the 1975-1979 period, and the period since then. In 1975-79 the yen real effective exchange rate rose strongly in response to cumulative current account surpluses (i.e. the period where GNP growth exceeded that of domestic demand) and weakened as the current account deteriorated. During the 1980-1984 interval the yen has generally weakened on a real effective exchange rate basis in spite of very substantial cumulative current account surpluses. These have arisen as sustained long term capital outflows from Japan have maintained the yen at an undervalued level on the foreign exchanges.

FORECAST: During the last five years, real GNP growth in Japan has been orientated heavily towards expansion in the external sectors of the economy. In the last two years, growth in Japan's current account surplus has become increasingly concentrated on the rise in Japan's bilateral surplus with the US. In 1984, both the increment and the absolute level of Japan's trade surplus were substantially the consequence of a larger surplus with the US.

The evidence presented above suggests strongly that Japan's very substantial cumulative current account surpluses have arisen mainly as a result of an undervalued yen-dollar exchange rate from the perspective of Japan's trade in goods and services and not mainly as a direct result of the US economy growing rapidly. The yen has been sustained at an undervalued level on the foreign exchanges by substantial long term capital outflows from Japan. These outflows from the surpluses, or savings, earned and retained by Japan are the counterparts to Japan's current account surplus. They have helped to sustain significant, complementary differences in the sources and structure of growth in Japan and in the US. In Japan, the counterpart to an undervalued currency and a current account surplus has been relatively stronger growth in Gross National Product than in domestic expenditure. In the US, the reverse has been true and domestic demand has risen at a faster pace than US GNP over the last two years. The impact of the dollar exchange rate on the US real economy may have been very substantial. We estimate that about two thirds of the US current account deficit has arisen directly as a consequence of the rise in the value of the dollar on the foreign exchanges. This may have reduced US real GNP growth by as much as two percentage points in 1984.

The distinction between the different rates of growth of domestic expenditure (i.e. domestic demand for consumption and investment goods) and GNP (i.e. the domestic supply of output) clearly is of great relevance to investors in international stockmarkets. Equity investors in an economy's stockmarket are concerned mainly with the growth rate of GNP, or the growth in the supply of output from that economy because it is from this source that profits are generated. An increase in domestic demand in an economy will not lead to higher profits in that economy if the increased demand is supplied by producers abroad.

In Japanese business cycles throughout the 1970's and in 1980, prior to the liberalisation of many of Japan's regulations on international capital movements, the trend in the yen exchange rate typically responded to and was symptomatic of

developments in Japan's real economy. As a result, international investors were often in the position to benefit simultaneously from strong increases in Japanese exports and an appreciating exchange rate. By contrast in recent years capital outflows from Japan have generated a weak yen-dollar exchange rate whilst facilitating strong growth in Japanese net exports. Conversely, the strong US dollar has caused US GNP (i.e. production) to be weak relative to US domestic expenditure (i.e. demand) and has resulted in a deterioration in US net exports. This implies that investors in the US exports and manufacturing sectors may be important beneficiaries of a weaker dollar on the foreign exchanges. A logical corollary of this is that investors who anticipate pronounced weakness in the US dollar should, a fortiori, also exercise caution towards Japan's future export performance.

This begs the question of the circumstances under which the dollar will or may decline. One topical approach, highlighted in the recent US-Japanese trade confrontation, has been to attempt to reduce the US trade deficit ostensibly by allowing US producers freer access to markets such as Japan. Whatever the longer term merits of efforts to promote free trade, it is clear, if the foregoing argument is correct, that this approach attempts to deal with a symptom and not a cause of dollar strength. It is evident in logic that the US cannot condemn its bilateral trade deficit with Japan without recognising that capital outflows from Japan - which represent a transfer of savings to the US - have sustained the yen at an undervalued level and have helped to generate the US trade deficit.

It is therefore apparent that a sustained trend change in the yen-dollar exchange rate must again await an adjustment in Japanese-US capital account transactions. One way in which the strength of the dollar may be self-correcting, over time, is suggested by the arguments above. If the dollar remains firm or strengthens further then it is likely that the divergence between growth in domestic demand and GNP will be exacerbated: further dollar strength will lead to a widening in the current account deficit and a reduction in US GNP (output). This may reduce the attractiveness of acquiring assets in the US rather than in competing economies, leading thereby to a reduction in net capital inflows to the US. This trend may be reinforced if in response to slower GNP and employment growth, the US authorities shift to an easier monetary policy.

Alternatively the yen may strengthen against the US dollar, and indeed against all other currencies, if there is an adjustment in the form of capital outflows from Japan. Capital outflows from Japan have weakened the yen mainly because these savings are used to acquire dollar (in the majority of instances) denominated assets. The outlook would change dramatically, however, if Japan's long term capital outflows began to take the form of yen financing. For then international borrowers in yen would need to acquire yen assets to service and repay their new yen-denominated liabilities. This shift, over the long term, in the denomination of Japan's capital outflow is possible only in the event of further progress in the liberalisation and deregulation of Japanese financial markets. However, were a trend towards reduced desired capital inflows to the US and a trend towards increased international yen financing to coincide it would result ultimately in spectacular strength in the Japanese currency on the foreign exchanges.

APPENDIX

CHART 12
JAPAN: NOMINAL GNP AND NOMINAL DOMESTIC EXPENDITURE

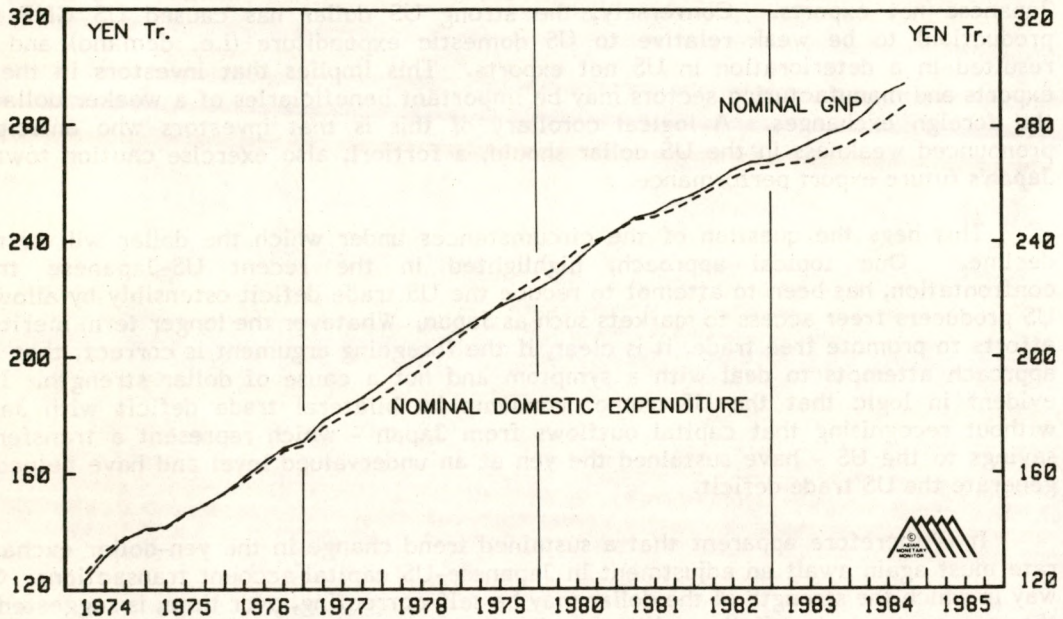


CHART 13
US: NOMINAL GNP AND NOMINAL DOMESTIC EXPENDITURE

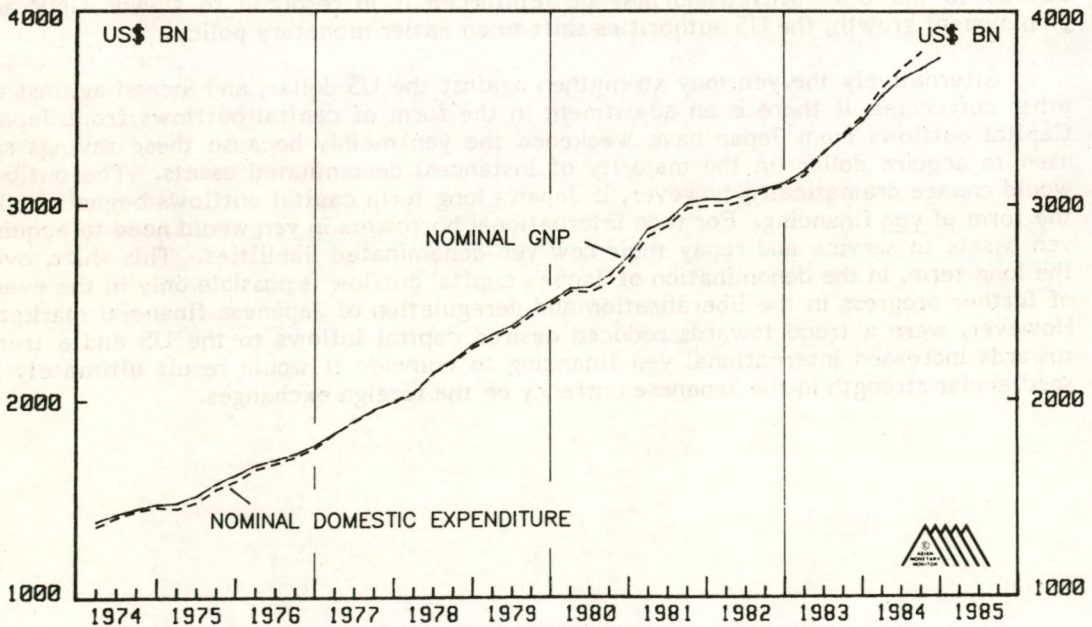


CHART 14
JAPAN: GROWTH RATES OF NOMINAL GNP AND DOMESTIC EXPENDITURE

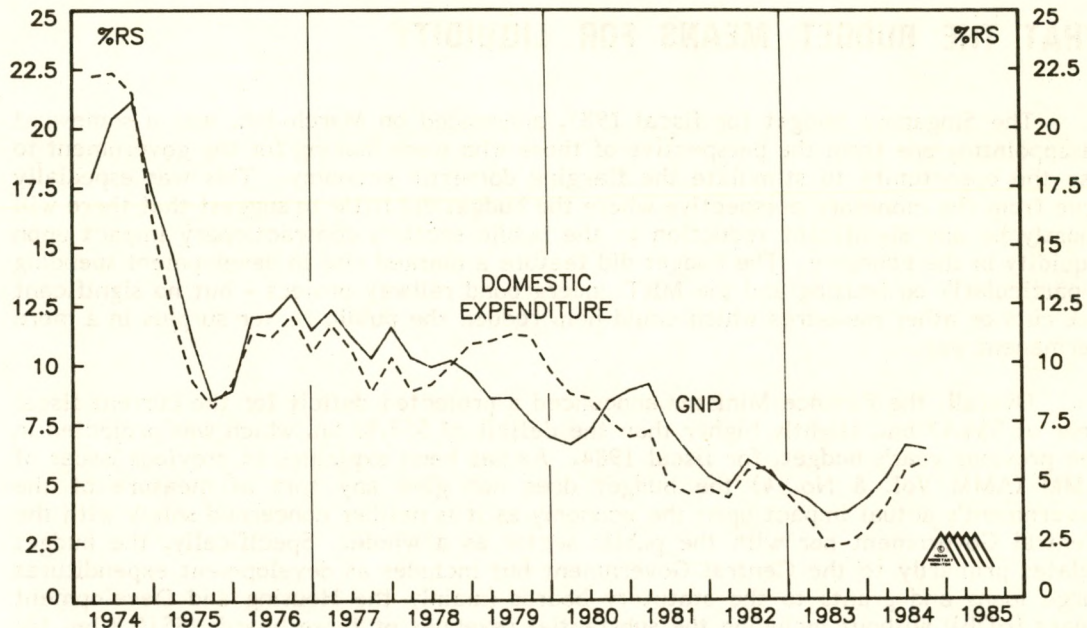
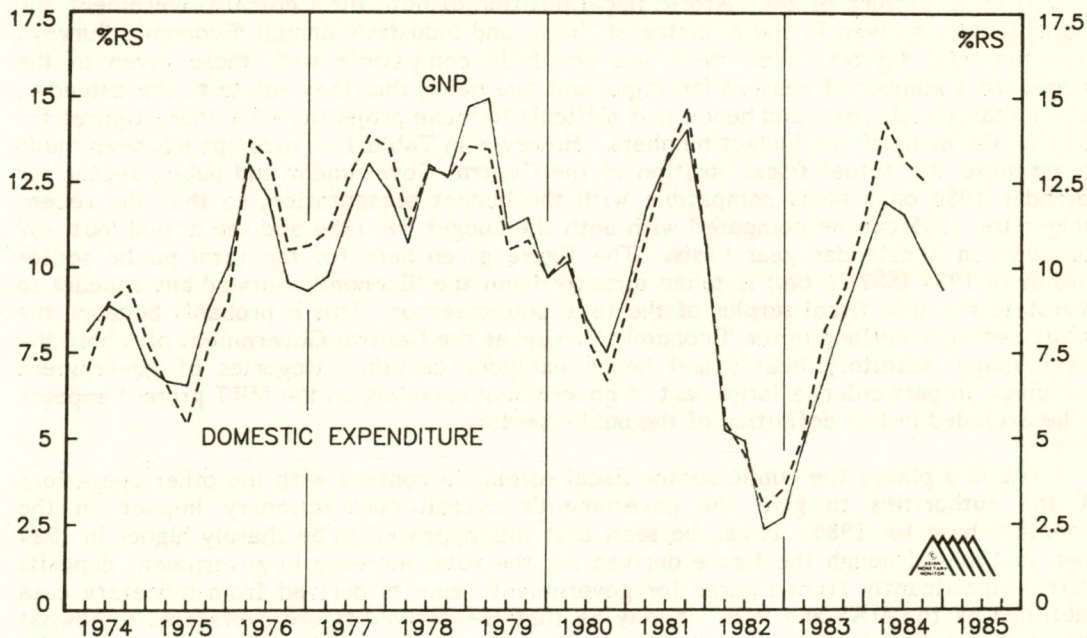


CHART 15
US: GROWTH RATES OF NOMINAL GNP AND DOMESTIC EXPENDITURE



SINGAPORE

WHAT THE BUDGET MEANS FOR LIQUIDITY

The Singapore budget for fiscal 1985, announced on March 8th, was a somewhat disappointing one from the perspective of those who were looking for the government to use the opportunity to stimulate the flagging domestic economy. This was especially true from the monetary perspective where the budget did little to suggest that there will shortly be any significant reduction in the public sector's contractionary impact upon liquidity in the economy. The budget did feature a marked rise in development spending - particularly on housing and the MRT underground railway project - but no significant tax cuts or other measures which could help reduce the public sector surplus in a more permanent way.

Overall, the Finance Minister announced a projected deficit for the current fiscal year of S\$4.47 bn., slightly higher than the deficit of S\$3.92 bn. which was projected in the previous year's budget, for fiscal 1984. As has been explained in previous issues of AMM (AMM Vol. 8 No. 4) the budget does not give any sort of measure of the government's actual impact upon the economy as it is neither concerned solely with the Central Government nor with the public sector as a whole. Specifically, the budget relates primarily to the Central Government but includes as development expenditures large loans and grants to the statutory boards (mainly the Housing and Development Board (HDB)) without including the substantial revenues of those boards (S\$10.8 bn. for the seven major statutory boards in the 1984 calendar year). Thus, in effect, the budget is the Central Government's budget on the revenue side, but the public sector's budget - or at least a large part of it - on the expenditure side. If an adjustment is made by taking the loans and grants out of the development budget, then the recently announced budget for fiscal 1985 would imply a surplus for the Central Government, of S\$3.78 bn., representing an increase over last year.

A truer picture of the historic fiscal position of both the Central Government and public sector is given in the Ministry of Trade and Industry's annual 'Economic Survey'. Unfortunately, figures given there are not fully compatible with those given in the budget for a number of reasons (an important one being that they relate to the calendar, rather than fiscal, year) and hence it is difficult to make projections for these figures for 1985 on the basis of the budget numbers. However in Table 1 an attempt has been made to estimate the actual fiscal position of the Central Government and public sector for calendar 1984 on a basis compatible with the budget presentation, so that the recent budget for 1985 can be compared with both the budget for 1984 and the actual 'outturn' for 1984 on a calendar year basis. The figure given here for the total public sector surplus in 1984 (S\$2.26 bn.) is taken directly from the 'Economic Survey' but appears to overstate the true fiscal surplus of the total public sector. This is probably because the public sector is defined in the 'Economic Survey' as the Central Government plus only the seven major statutory boards and hence excludes certain categories of government spending. In particular, a large part of government spending on the MRT project appears to be excluded in this definition of the public sector.

Table 2 places the public sector fiscal surplus in context with the other operations of the authorities to give the government's overall contractionary impact on the monetary base for 1984. It can be seen that this appeared to be sharply higher in 1984 than in 1983, although the figure derived for the total increase in government deposits differs significantly from figures for government deposits derived from monetary data published by the MAS and IMF. It may be that the derived figure overstates somewhat the real contractionary impact of the government in 1984 as a result of the understatement of government spending mentioned above, in particular in relation to the growing importance of the MRT project in total government spending.

SINGAPORE
 CHART 1: MONEY, OUTPUT AND PRICES

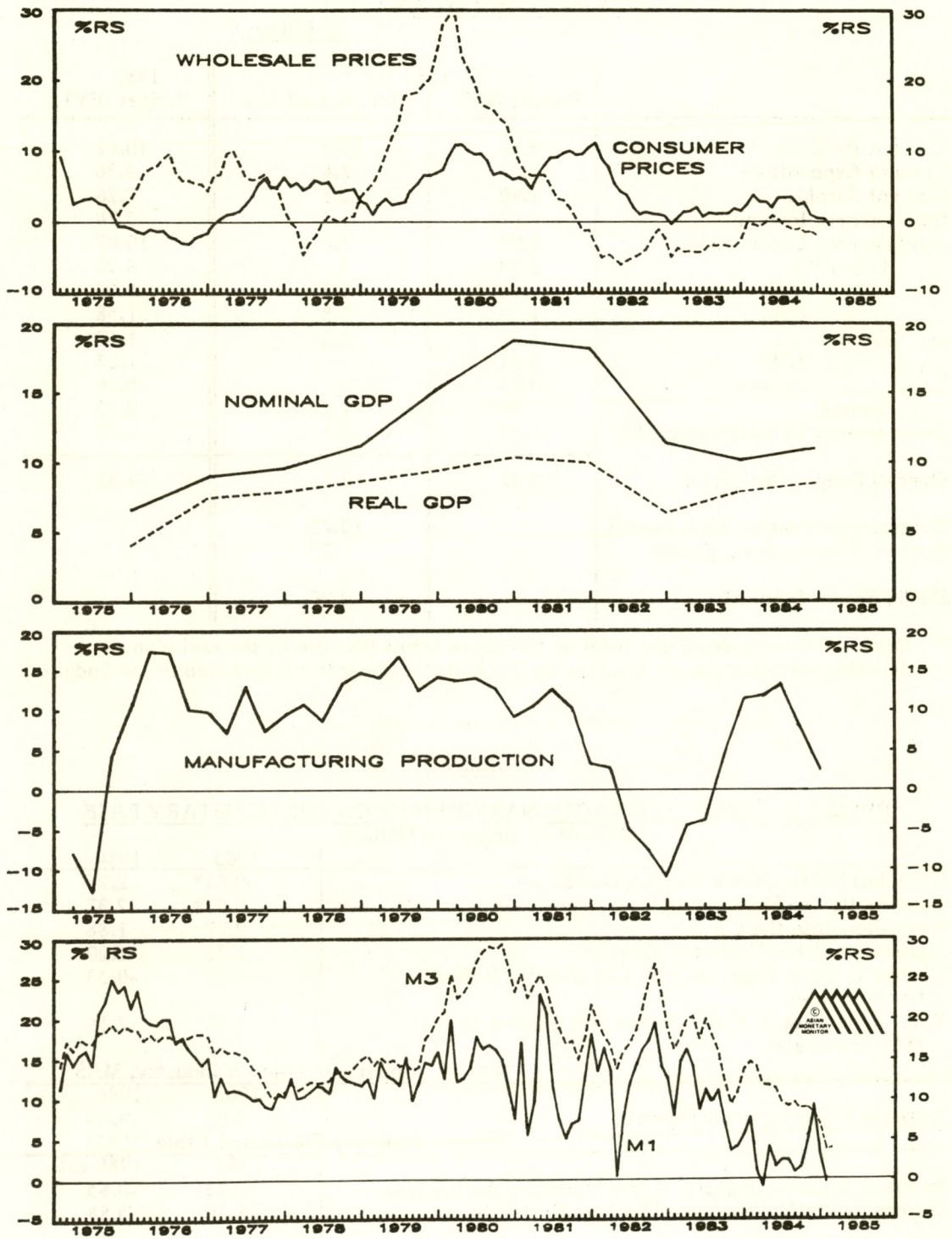


TABLE 1

BUDGETS FOR 1984 AND 1985

S\$ Billion

	1984		1985
	Budget (FY)	Est. Actual (CY)	Budget (FY)
Current Revenue	9.97	10.5	10.62
Current Expenditure	7.57	8.4	8.36
Current Surplus	2.40	2.1	2.26
Development Income	2.67	1.2	3.74
Development Expenditure	8.99	7.0	10.47
Loans	5.39	3.5	6.58
HDB	4.00	2.7	5.00
Others	1.39	0.8	1.58
Grants	1.31	1.3	1.67
MRT	0.65	-	1.03
Others	0.66	-	0.64
Others	2.29	2.2	2.22
Development Surplus/Deficit (-)	-6.32	-5.8	-6.73
Overall Budget Deficit (-)	-3.92	-3.7	-4.47
Revenues of 7 Major Stat. Boards		10.78	
Current Expend. Stat. Boards		4.29	
Public Sector Surplus*		2.26	

* Does not exactly equal the total of the above items because of the omission of development expenditure incurred by the statutory boards not included in the budget.

TABLE 2

PUBLIC SECTOR'S CONTRACTIONARY IMPACT ON THE MONETARY BASE

Billions of Singapore Dollars

	1983	1984
(Official) Public Sector Surplus/Deficit (-)	-0.84*	2.26
Contribution to Sinking Fund	2.07*	2.37
Net Inflow into the C.P.F.	2.77	1.88
Increase in Other Domestic Debt	1.73	1.20
Change in Govt. Deposits with Commercial Banks (increase = -)	-1.10	-0.53
Total = Increase in Public Sector Net Claims on the MAS (Estimate)	4.64	7.16

Source: Ministry of Trade & Industry, MAS

	1983	1984
Increase in Government Deposits	5.02	4.45

Source: Monetary Formation Table (MAS)

	1983	1984 est.
Increase in Govt. Deposits at the Monetary Authorities	-2.83	-0.65
Government's Acquisition of Foreign Exchange	8.16	5.84
Total = Increase in Public Sector Net Claims on the MAS (Estimate)	5.33	5.19

Source: IMF

* Revised figures

Nevertheless, although the exact size of the government sector's contractionary impact on the monetary base in 1984 may be open to some question, the effect can clearly be seen in the monetary aggregates. The rate of money growth slowed continuously throughout last year until, by the end of December, the year-on-year rates of M1 and M2 growth had fallen to only 3.0% and 6.2% respectively. This was despite a record surplus on the overall balance of payments which, other things being equal, should have resulted in strong monetary growth through the managed exchange rate regime operated by the MAS.

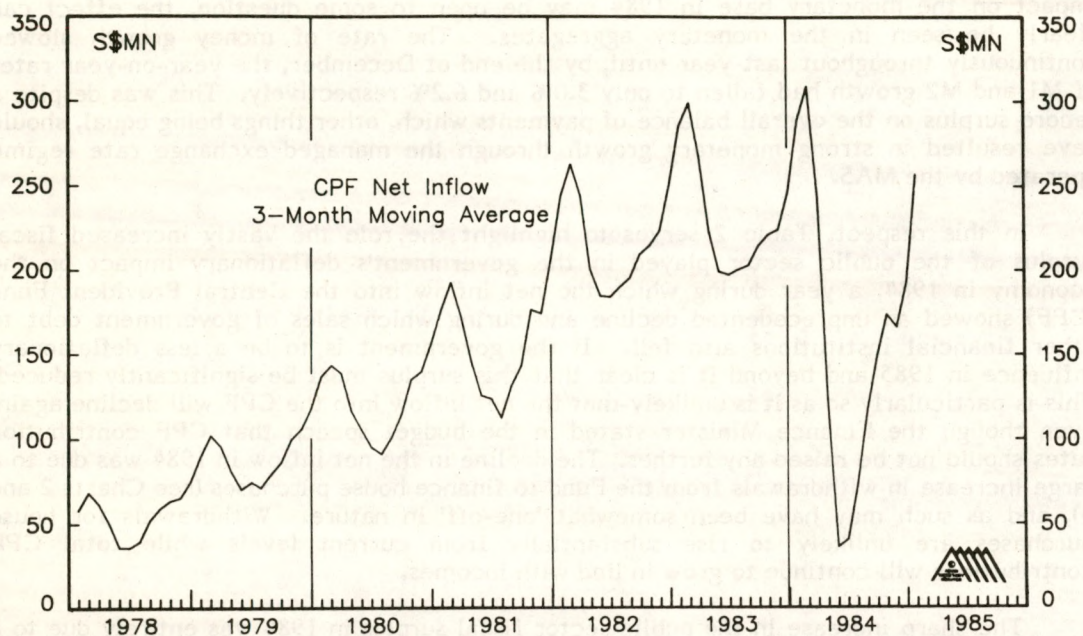
In this respect, Table 2 serves to highlight the role the vastly increased fiscal surplus of the public sector played in the government's deflationary impact on the economy in 1984, a year during which the net inflow into the Central Provident Fund (CPF) showed an unprecedented decline and during which sales of government debt to other financial institutions also fell. If the government is to be a less deflationary influence in 1985 and beyond it is clear that this surplus must be significantly reduced. This is particularly so as it is unlikely that the net inflow into the CPF will decline again, even though the Finance Minister stated in the budget speech that CPF contribution rates should not be raised any further. The decline in the net inflow in 1984 was due to a large increase in withdrawals from the Fund to finance house purchases (see Charts 2 and 3), and as such may have been somewhat 'one-off' in nature. Withdrawals for house purchases are unlikely to rise substantially from current levels while total CPF contributions will continue to grow in line with incomes.

The sharp increase in the public sector fiscal surplus in 1984 was entirely due to a large increase in the revenues of the statutory boards, which grew from S\$6.74 bn. in 1983 to S\$10.78 bn. last year. As stated above, these revenues do not feature in the budget. Statutory board revenues are unlikely to jump again in 1985, although insofar as they derive from sales of housing units by the HDB, they may remain at current high levels. Nevertheless, when taken in conjunction with the budget figures presented in Table 1 this fact does give cause for reasonable hope that the public sector surplus will decline from high 1984 levels this year. In particular, with revenues unlikely to increase, the surplus of the statutory boards should decrease in 1985 as a result of the increase in spending by the HDB suggested in the budget numbers. (Development expenditure of the seven major statutory boards had been slightly lower in 1984 than in 1983.)

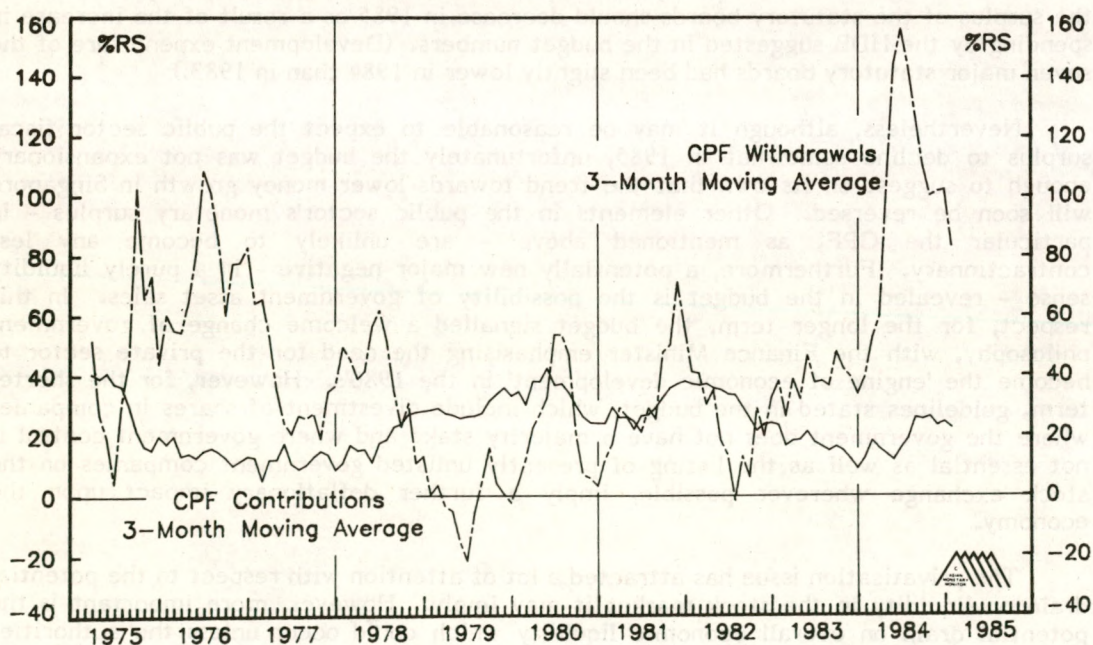
Nevertheless, although it may be reasonable to expect the public sector fiscal surplus to decline somewhat in 1985, unfortunately the budget was not expansionary enough to suggest on its own that the trend towards lower money growth in Singapore will soon be reversed. Other elements in the public sector's monetary surplus - in particular the CPF, as mentioned above - are unlikely to become any less contractionary. Furthermore, a potentially new major negative - in a purely liquidity sense - revealed in the budget is the possibility of government asset sales. In this respect, for the longer term, the budget signalled a welcome change of government philosophy, with the Finance Minister emphasising the need for the private sector to become the 'engine of economic development' in the 1980's. However, for the shorter term, guidelines stated in the budget, which include divestment of shares in companies where the government does not have a majority stake and where government control is not essential as well as the listing of presently unlisted government companies on the stock exchange wherever possible, imply a further deflationary impact upon the economy.

The privatisation issue has attracted a lot of attention with respect to the potential drain on liquidity in the stock market it may imply. However, more important is the potential drain on overall economic liquidity which could occur unless the authorities take offsetting monetary expansionary measures.

SINGAPORE
CHART 2: NET INFLOW INTO THE C.P.F.



SINGAPORE
CHART 3: CONTRIBUTIONS TO AND
WITHDRAWALS FROM THE C.P.F.



It is widely believed that the liquidity impact of privatisation will be neutral because CPF monies will probably be allowed to be utilised for the purchase of government assets. However, although it is true that if CPF withdrawals are in future permitted for share purchases, then in a narrow sense government asset sales may have a neutral impact upon liquidity, in a wider sense this may not be the case. The purchase of government assets may divert CPF monies from other existing (or potential) uses thus meaning that the CPF net inflow does not drop by enough (relative to what it would have been in the absence of government asset sales) to fully offset the negative liquidity effects of those asset sales. In short, at a time when the CPF is already becoming a less deflationary force in the economy the government is unlikely to permit further large falls in the net inflow into the fund, and if the potential for further large falls materialises the government would be likely to take offsetting measures (perhaps measures to raise the gross inflow).

The very large contractionary impact of the government sector has been prevented from leading to an even sharper decline in the rate of money growth over the past two years by the very large balance of payments surpluses Singapore has enjoyed. Large balance of payments surpluses (the overall balance surplus was a record S\$3.23 bn. in 1984) have been very much contrary to our expectations where, in past issues of AMM (AMM Vol. 8 No. 1, AMM Vol. 8 No. 4), we have frequently highlighted major areas where the external balance could be expected to have been deteriorating. Indeed, the net monetary capital inflow (discussed in AMM Vol. 8 No. 1) did fall sharply in 1984, from S\$2.83 bn. to S\$1.60 bn., entirely as a result of a reversal of the monetary capital flow between the domestic banking sector and the Asian Currency Units of the Asian dollar market, which marginally reduced net interbank funds held in domestic banks in 1984, after having increased them sharply in 1983. The non-monetary capital inflow (direct investment, portfolio investment etc.) remained at 1983 levels, or roughly S\$1 bn. below levels recorded in 1981-82.

Similarly, the recorded current account position failed to improve further in 1984 as the favourable impact on the trade account of continued strong growth in exports to the US was totally offset by a continuing deterioration on the balance of services. Thus, the sharp improvement in the overall balance of payments in the statistics reflects entirely a massive swing in the balancing item, which swung from a S\$1.39 bn. deficit in 1983 to a surplus of S\$838 million in 1984. This could be the result of an improvement in unrecorded trade transactions or capital inflows.

The 1984 figures continue the trend established in 1983, in that Singapore's large balance of payments surplus has begun to look increasingly precarious, based as it has been increasingly on exports of manufactured goods to the US and monetary capital inflows. This situation may be sustainable in 1985, when we expect the US economy to be strong, but may present problems next year. Then, if the balance of payments deteriorates and there is no change of policy by either the MAS, in particular with regard to the exchange rate, or by the government, with regard to its fiscal stance, there could be a sharp monetary contraction.

Also, the co-existence of a current account deficit, financed to a large degree by financial capital inflows, and a public sector fiscal surplus is a somewhat unusual state of affairs and one which could have potentially disturbing implications - other than purely monetary - if continued over the longer term. The implication is that net acquisition of financial assets by the private sector is a large negative, as both the public sector and the overseas sector are acquiring financial claims on the private sector. The corollary of this is that the private sector's investment vastly outweighs its savings. This is not in itself unusual (particularly for a developing, or rapidly growing, economy) although the magnitude of the difference is very large relative to GNP in Singapore. More unusual is the way in which this is occurring. In Singapore, the private sector's net acquisition of financial liabilities is occurring through the banking sector as the banks are acquiring a growing liability to both the public sector (through the increase in public sector deposits

and, probably, borrowing from the MAS) and to the overseas sector (through the monetary capital inflow). The banking sector is 'financing' this net liability by continuously increasing its net claims on the non-bank private sector, as new lending to the private sector outweighs the increase in private sector deposits, or the money supply.

In itself this need only mean that money supply growth is relatively low (relative to growth in bank lending, that is), but in Singapore it has been allowed to be absolutely low. The result is that the non-bank private sector is becoming increasingly highly geared at a time when money growth is in a state of continuous decline. In effect, the non-bank private sector is becoming increasingly highly geared into an economy susceptible to a marked slowdown in growth and into assets vulnerable to large price falls. This could tend to accentuate any downturn in the economy that occurred as the result of a world or domestic recession.

FORECAST: The rate of money supply growth in Singapore has continued to decline as the deflationary impact of the operations of the public sector has outweighed the stimulatory effects of a record balance of payments surplus. In 1984, the major cause of the large size of the public sector's contractionary impact on the monetary base was the fiscal surplus itself. The recent budget for fiscal 1985 suggests that this surplus will be reduced somewhat as a result of increased development spending, particularly on housing and the MRT project. However, this may not be enough to lead to a pick-up in money supply growth when other influences, in particular the CPF and government asset sales, are likely to be becoming larger contractionary forces. Furthermore, the balance of payments surplus, although it may remain large this year, is likely to become less dependable as a source of monetary stimulus in the longer term.

The effect of the slowdown in the rate of money growth has been evident for more than 1 1/2 years in the stock and property markets and is now evident (since the final quarter of last year) in the domestic economy itself. This in itself makes a policy change which would stimulate money growth and the economy a more likely possibility. Such a policy change could take many forms, a depreciation of the exchange rate, a cut in tax rates, measures to encourage greater withdrawals from the CPF or a large shift in government deposits from the MAS to the commercial banks being the major ones. However, in the absence of one or more of these policy changes the rate of money growth in Singapore is likely to continue to decline, eventually pushing the economy into unwarranted domestic stagnation.

EPISODES FROM ASIAN MONETARY HISTORY

IRON VERSUS COPPER COINAGE IN PRE - MODERN JAPAN

Erich Pauer (University of Bonn, F.R. Germany)

1. INTRODUCTION

In Europe iron was rarely used as a metal for coins. Although it had been used as a monetary equivalent in ancient Greece as well as in the early days of the Roman Empire iron was not used in the form of coins. An early - but rare - example of the use of iron coins can be found in Western Europe, where the Celts used them in the second half of the first century B.C. Later historical records from the European middle ages reveal that iron was used as a money substitute in the form of bullion, bars or nails. With the exception of these few cases coins are generally made of rare and durable metals, the rapid oxydization of iron causing it to be unsuitable for the minting of coins.

In contrast to the rare use of iron in Europe, many examples of the use of iron coins can be found in East Asia - particularly in Japan. The first historical records of such coins in Japan date back to the 8th century A.D. These coins were probably not produced in Japan itself where easily exploitable copper mines in the Kanto-area provided the basis for a flourishing bronze-coinage (chiefly copper and tin) industry from the 8th to the middle of the 10th century, but were imported from China. We have no knowledge of the individual value of these iron coins in Japan, because of the lack of detailed information (Asakawa 1963:308), and it is doubtful whether these coins were circulated as a means of payment (Miyashita 1930:48-49).

Although we do not have any further information about the use of iron coins in Japan in the following centuries, there is some evidence for the existence of iron coins in neighbouring countries. For instance in Korea in the 15th year of King Songjong (i.e. 996 A.D.) during the Koryo-dynasty iron coins, 26-27 mm in diameter and with characters on their obverses and reverses, are said to have been in use (Bank of Korea 1969:112). On the Ryukyu Islands in the South of Japan iron coins are believed to have been used in the 15th century, while these islands remained an independent kingdom. (The author was not able to verify this information, cited in Polder 1891:499-500, but Chinese bronze coins were used throughout East Asia in the Middle Ages, and also Chinese iron coins).

After the initial production of bronze coins in the 8th century, production ceased in 958 and no further issue of coins occurred in Japan until 1563 when Japan was unified at the end of the 16th century. Whereas in the Middle Ages old Japanese coins as well as imported Chinese coins had been used alongside a 'natural money system' consisting of rice or fabrics as means of payments - these had been established after Japanese coinage ceased in the 10th century - now the monetary system was rearranged under the power of the centralized government headed by a military governor, the Shogun, residing in Edo (present-day Tokyo).

In Japan after 1600 we can find three classes of coins consisting of different metals and differing units of value. The metals used for coinage were gold, silver, bronze (and sometimes brass), and later iron and even lead.

- (1) Gold coins (in units of ryo-bu-shu at the rate 1 ryo=4 bu=16 shu) of various kinds and sizes were very precious and hardly circulated at all. They were used for larger transactions especially in Edo, but later, after these coins had been debased, they too circulated more widely.

- (2) Silver coins of different kinds and sizes were used as the most frequent means of payment (in units of momme-bu-rin at the rate 1 momme=10 bu=100 rin) in the centres of commerce, such as Osaka and Kyoto.
- (3) The general currency used by the common people consisted mainly of bronze coins, called zeni (in the unit mon).

Exchange rates between the various metallic coins were fixed by the government, but despite all efforts to stabilise them, constant variations in market prices between the coins can be observed throughout the Edo-period (1600-1867). Both the central government as well as the feudal lords frequently resorted to debasement to alleviate their financial difficulties. The widespread use of money in this period often made it necessary for the merchants to switch from coins of one metal to another. The debasements and the variety of monetary units in use created a demand for skilled money-changers. Consequently, alongside the officially fixed exchange rates a second set of free market exchange rates developed.

One basic fact concerning coinage to be noted relating to all pre-Meiji Japanese coins was that they were not minted, but cast. This should be emphasized as one characteristic of all early Japanese coins.

2. THE IRON COINS OF JAPAN

After 1600, when Japan was unified under a strong centralized government headed by the Shogun, the country was governed by nearly 260 feudal lords (Daimyo) each having received his fief from the hands of the Shogun. Usually the feudal lords were permitted to rule their fief without much interference from the central government, but certain legal rights were restricted in the hands of the central authority, among these the sole right of coinage. However, such rights could be entrusted to a particular feudal lords on occasion.

Gold, silver and bronze were the only metals used for coinage until the 18th century, when in 1739 the first iron coins made their appearance.

The remainder of this paper concentrates on three topics: (1) the reasons for the use of iron as a metal for coins, (2) the main periods of casting iron coins and the problems which arose, and (3) the use of new technologies for casting iron coins in the later period.

2.1. Japanese copper exports and the introduction of iron coins

In 1638 Japan had secluded herself from the rest of the world by closing all ports to foreign ships. Only Chinese, Dutch, Korean and Ryukyuan merchants were allowed to trade with Japan, but only via one port, Nagasaki, in the South of Japan. Although Japan did not have many commercial products to offer to the foreign merchants, copper was eagerly requested by the Dutch as a profitable return freight. The Dutch were willing to accept copper in exchange for all the products they delivered to Japan so that in the early seventeenth century between 300 and 500 tons of copper were exported annually. When copper supplies became short on the Japanese market, the export of copper was prohibited by the central authorities in 1637 for the first time (for details of this policy see Ishii, 1947). After the ban on the export of copper, bronze coins, called Kanei-tsuho (i.e. "Treasure of the Kanei-period" - according to the characters on one side of the coin) were cast. These coins became the standard model for various types of coins thereafter. The characters on the obverse were intended to provide evidence of the period of their production, i.e. the Kanei-period from 1624 to 1644, but since most of the coins cast afterwards also used these characters, they cannot now be used for identifying the casting dates of particular coins.

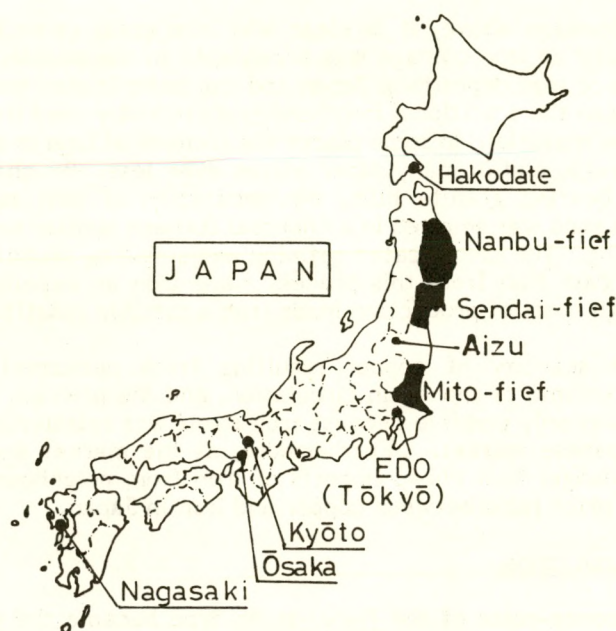


CHART 1: The main areas and places where foundries for casting iron coins were erected during the Edo-period.

After a certain amount of coins of the Kanei-tsuho type had been cast, the embargo on copper export was lifted and the quantity of copper exports increased again. At the end of the 17th century almost three quarters of the value of goods imported to Japan were financed by exports of copper (Kobata 1966:212). Japanese copper was usually not shipped to Europe, but was exchanged for silk and other commodities in China, South-East Asia and India.

The central government, eager for revenues, tried to monopolize the production of copper and the copper trade. The disadvantage of this policy was that in spite of the interest the government showed in copper production, no advanced techniques of mining and refining were imported from foreign countries, which could have helped to increase production as necessary. On the contrary, officials responsible for copper production were often incompetent, consequently the result was a decrease in the amount of copper produced. As the economy began to prosper around 1700 there was an increasing demand for coins throughout the whole country. The government responded by again taking measures to restrict copper exports and as a result the amount of copper exported fell to about a quarter of its previous volume, averaging some 120 tons per annum between 1720 and 1750.

In addition to the shortage of copper, a second factor contributing to the emergence of iron coins was the steady inflation which had taken place in these years. This had been caused by the debasement and recoinage of gold and silver coins. The general rise in prices in terms of the face value of the gold and silver coins produced a strong demand for small coins (i.e. bronze coins) which could no longer be satisfied from existing stocks.

As a last resort the government decided to cast coins using another material which was not in such short supply as bronze (copper), but was nearly as valuable - namely, iron. Iron coins were therefore cast for the first time in the year Genbun 4 (1739) as a substitute for the diminishing bronze coins.

From the discussion above, it is clear why iron coins came into being, but it is interesting to ask why an iron coinage was acceptable to the people. The answer can be found in the nature of iron deposits in Japan and the complicated techniques of smelting and refining. In Japan the traditional iron handicraft industry used iron sand (not iron ore as in Europe) as raw material. In some places the content of iron in the soil was between 3% and 5% on average, and in many other places even less. By channeling river water through iron-sand bearing granite hills, the separation of iron sand from earth was achieved. The iron sand was smelted in a charcoal furnace similar to the modern method of direct steelmaking. The complicated refining and smelting process as well as the low output of steel or cast iron from this process made iron an expensive raw material in Japan. Thus the high costs of production made iron a suitable substitute for bronze.

In short, the scarcity of copper resulting from persistent exports caused a contraction in the volume of money in circulation, and the problem was solved with the use of iron. This was only possible because iron itself was relatively rare, and costly to produce on the Japanese market. Furthermore, as the market was virtually a closed one, there was no danger that cheap imports of iron from neighbouring countries would upset the domestic price ratio between copper and iron in Japan.

2.2 The casting of iron coins.

The earlier bronze-coins of the Kanei-tsuho-type became the model for the shape of the later iron coins, too. The new iron coins were also round, with a square hole in the center, a thicker rim, and about 23 mm in diameter. The legend on the obverse of the iron coins was again "Kanei-tsuho" (Treasure of the Kanei-period), despite the fact that these coins were cast in the Genbun-period. The reverse of the coins was mostly bare, but now and then characters can be found, identifying the place of the foundry or the fief that issued the coins (Fig. 1) since it was not only the central authority that cast such coins, this right being also granted to various fiefs.

The coins were not cast piece by piece, but in dozens. The production process for iron coins was similar to that of bronze coins (Fig. 2), and consisted of seven main stages:

- 1) A design of the coin was drawn on paper.
- 2) An original in metal was made.
- 3) From this original a tin coin was taken.
- 4) With the help of this tin-coin, sand moulds were used to fabricate copper copies which now were used as lower and upper dies for making the sand moulds for iron casting.
- 5) In the larger moulds (usually closed moulds consisting of two parts) pouring channels were dug like a tree (Fig. 3) with branches on the left and right.
- 6) An upper and lower die (sand-mould) containing the coin moulds and a foundry-identification symbol were then clamped together ready for casting.
- 7) After the casting and cooling down, the "tree" (Fig. 3) was taken out of the mould, and the coins were broken from the "branches". In some cases the coins were cleaned to remove surface crust, and the seam was ground flat, but usually the iron coins were circulated in an unfinished state and in a very rough condition (Kubota 1979:57).

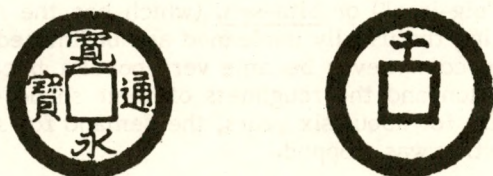


Fig. 1 : The first iron coins cast in Japan. Obverse (left) with the legend "Kanei-tsūhō", reverse (right) with the character sen, which means that this coin was cast in Sendai-fief, at the foundry in Ishinomaki.

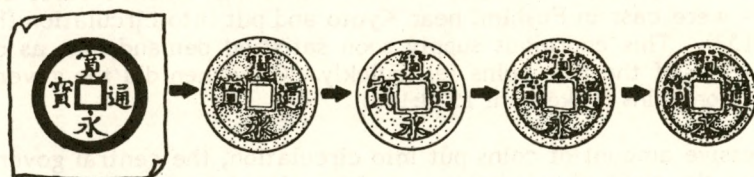


Fig. 2 : The process of production from the sketch to the iron coin

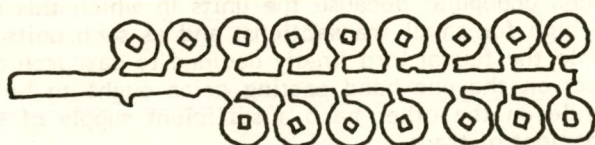


Fig. 3 : The cast-iron "coin-tree" with numerous "branches"

2.3 The Casting Periods

During the Edo-Period (1600-1867) there were three main periods of activity in casting iron coins:

First period: As already mentioned, the casting of iron coins started in Genbun 4 (1739). At least nine foundries where bronze coins had been cast earlier switched to the casting of iron coins until Enkyo 2 (1745). Since the nominal value of these iron coins was 1 mon, they were called tetsu-ichi-mon-sen (one mon iron coins) in Japan. Other terms like nabe-sen (derived from nabegane, "pig-iron") or bita-sen, (which has the meaning of a rough and inferior coin, thus reflecting the usually uncleaned and unfinished faces of the coins) were common. However iron coins never became very popular because of their inherent disadvantages: rapid oxydation and the roughness of their shape due to crude casting. After casting such iron coins for about six years, the demand for small coins in the country was satisfied and the casting was stopped.

Second Period: Within 20 years a shortage of the smallest unit of coins once more developed, so that the central government decided to start casting iron coins again. The reason for the shortage of small coins was the rapidly expanding domestic trade in the 18th century, which reached even distant villages and remote areas, thus causing the "money economy" to penetrate the whole country. Trade in smaller goods and commodities like sickles, wooden cups and other essentials by itinerant merchants made smaller coins necessary, too. However the quantity of means of payment was not expanded sufficiently to match the increasing volume of transactions in the economy. In order to overcome the shortage of small coins more iron coins - with a value of more than two billion mon - were cast in the foundry of Kameido in Edo between the years Meiwa 4 (1767) and Anei 3 (1774). At the same time iron coins - with a value of more than 1.5 billion mon - were cast in Fushimi near Kyoto and put into circulation (Kobata 1966:224; Seto 1957:153). This enormous supply soon satisfied demand, but as casting was not stopped the value of the iron coins fell quickly. Only then did the government decide to stop casting iron coins (Takekoshi 1930:150).

Due to the excessive amount of coins put into circulation, the central government now decided to give up the right of sole coinage and permitted feudal lords to cast iron coins, too. The consequences of this step on a local level were hardly realized at first. Two examples will suffice to illustrate the typical results.

Example 1: The feudal lord of Mito had repeatedly tried to stabilize the financial affairs of his fief, a fief with only limited natural resources. Despite all efforts he failed again and again for different reasons. In a last attempt to stabilize the fief's finances it was decided not to issue paper money as during the earlier attempts. These attempts to circulate paper money had been unpopular because the units in which this money was denominated (1 bu) were too high for small transactions, and as such units were very inconvenient for ordinary people the feudal lord finally decided to cast iron coins. Two positive results were expected: on the one hand casting coins ought to be helpful to overcome the fief's crisis, while on the other hand a sufficient supply of small coins should be useful for the development of trade.

In the year Meiwa 6 (1769) Mito was given permission to cast iron coins, but casting was not directed by the fief's officials themselves, but by two merchants, who practically had the right to lease the coin casting.

The merchants who were ordered to cast the coins erected buildings and several foundries, bought raw materials, employed workers and cast coins, which then were placed at the fief's disposal. Since production costs as well as the raw materials were relatively cheap, the difference between these costs plus the profit of the merchants plus

taxes to the government was still lower than the actual nominal value of the coins cast. A profit or seignorage of about 5000 ryo per year was expected (Seya 1973:145), a sum which already covered a considerable part of the fief's yearly expenses. The fief's officials believed that putting these coins into circulation would help the fief to regain financial stability.

Near Mito, in Ota-mura, Kizaki (presently Hitachi-Ota-city) about 100 smelting furnaces were erected. The raw material, iron sand, was provided from domestic production within the fief's boundaries, from Taga, situated on the Northwestern coast of Japan. But iron was also imported from the neighbouring Nambu-fief. The farmers in the neighbourhood of the foundries were employed as workmen. At times up to 4000 persons were engaged in these foundries.

After the right to cast coins was granted in 1767, about 1000 million mon were cast annually in the following years. The putting into circulation of such an amount of coins implied an expansion of the money supply far out of proportion to economic growth in the fief and had considerable consequences.

Before the casting started the exchange rate between gold and bronze coins was about 1:4000, i.e. one gold-ryo could be bought for 4000 bronze coins. But after casting started and the iron coins instead of bronze coins were put into circulation the exchange rate dropped to 1:5000 and 10 years later, in 1780 the exchange rate was 1:6000 (Kidota 1970:222-228).

If wage rates are used for comparison, the meaning of the exchange rate deterioration becomes clearer. In Northern Japan in 1760 a day-labourer got 50 mon a day, a carpenter 100 mon, and a bricklayer 200 mon (Hanley & Yamamura 1977:155) on average. A day-labourer could earn 1250 mon if he worked for 25 days (i.e. one month), and a bricklayer could earn 5000 mon per month. Since nominal wages remained fixed in terms of iron coins, workers on these payscales suffered a 50% depreciation in purchasing power relative to gold coins and items priced in gold during the decade of the 1760s. Although the Mito fief reduced taxes, farmers' incomes declined like the craftsmen because of the deterioration of the exchange rate between iron coins and gold.

When granting the right to cast coins the central government usually also ordered that the coins were only to be used within the fief's boundaries and not throughout the whole country. But this order was not observed, and illegal export of iron coins from the fief started as the money supply in the fief grew excessively. In Meiwa 8 (1771) - only three years after the casting of iron coins had started - discontent due to falling real wages led to riots. The foundries, furnaces and buildings were burnt down and nearly 200 persons were killed. Despite this, casting iron coins was only temporarily interrupted, the government believing that the situation could be improved by the removal of the merchants who were in charge of the casting, thus showing the fief government's ignorance of the situation it had created by putting these coins into circulation.

Even after the central government in Edo decided to forbid completely the casting of iron coins throughout Japan, the Mito-fief - obviously unaware of the connection between coinage and inflation and still believing that casting coins would give the fief greater financial strength and independence - was exempted from the national ban on further casting. In Meiwa 3 (1774) production started again with 24 furnaces. As prices rose again the exchange rate deteriorated rapidly, leading to another farmers' riot. Only the spread of ravaging and plundering to the fief's capital Mito itself finally induced the authorities to cease casting iron coins in 1775 (Kidota 1970:229-234; Kokushi 1928:118-122).

The coins cast in this period are easy to identify: coins cast in the earlier part of the period have the character kyu (the first character of Kuji, the name of the district where the foundries were situated) on the reverse; coins cast in the later half of the period are to be identified by the character ni (= two), thereby showing that the coins dated from the second half of the casting period. The value of the coins produced amounted to 800 million mon (Seto 1957, Kobata 1966:224).

The Mito-fief had tried to raise revenues and provide employment within the fief not by putting into circulation paper money (as other fiefs had done) but by finding another way - casting iron coins, and Mito ended by suffering the same fate. It is curious that the authorities did not appear to understand that there is no difference between issuing paper money in excessive quantity and casting an excessive quantity of iron coins. Despite the findings of Arai Hakuseki, a scientist, economist and philosopher in the early 18th century, who understood the connection between the money supply and inflation, and had also written about it, this knowledge was not widespread and not common to officials of the central government or the government of the fiefs.

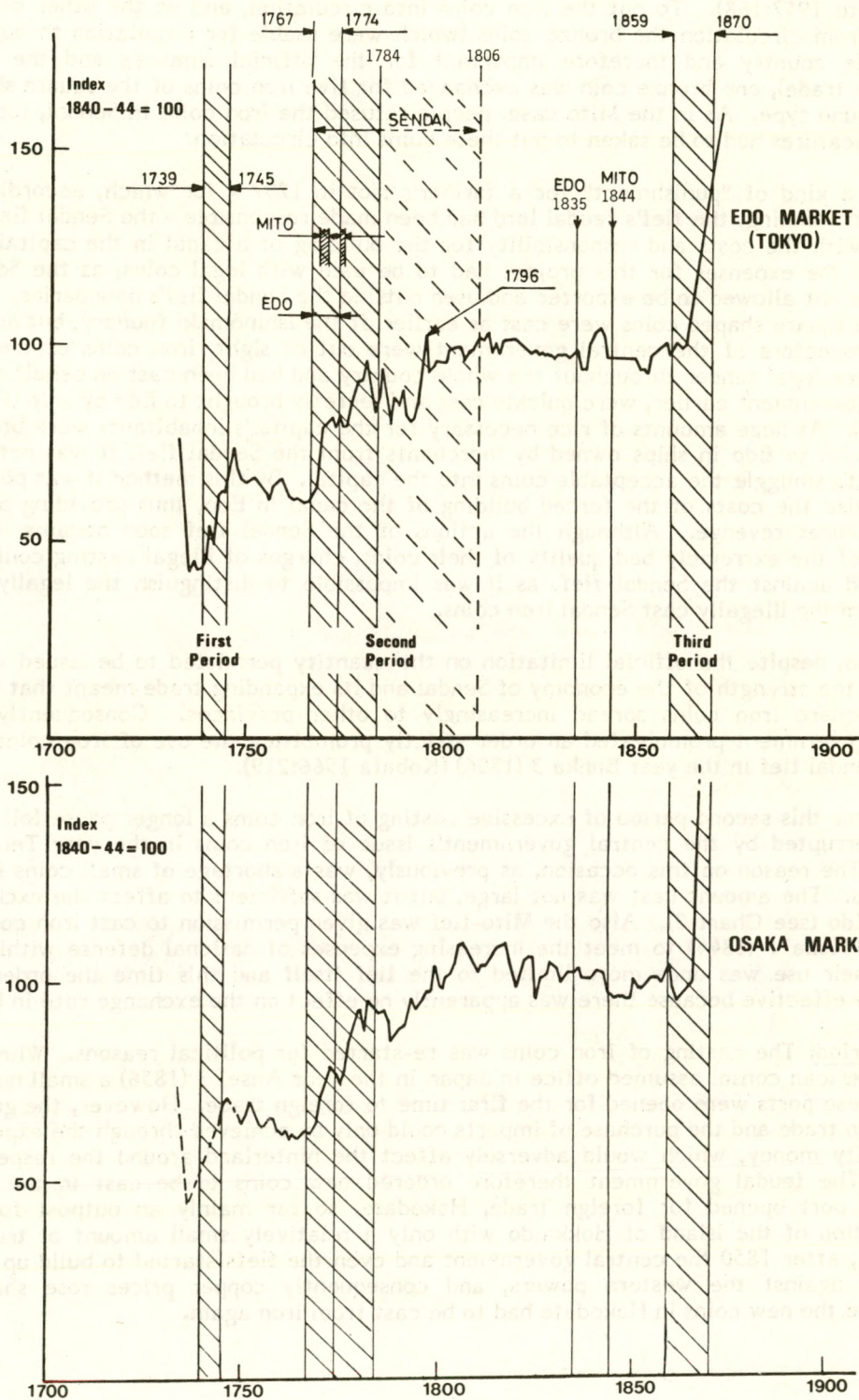
Example 2: Permission to cast iron coins was granted to the feudal lord of Sendai in Northern Japan in the year Temmei 4 (1784), but had different consequences from the previous example. The Sendai-fief had already obtained permission to cast iron coins of the Kanei-tsuho type) between the year Meiwa 5 (1768) and Temmei 4 (1784). Approximately 100 million mon were cast every year. The effects on the fief's economy, which was already quite prosperous thanks to its various natural resources, were not as drastic as in the case of Mito.

Because some coins were cast without any character on the reverse and were therefore unidentifiable, some coins were illegally exported from the fief by the fief's officials. To prevent this leakage, the Sendai fief was only allowed to cast coins of a specified shape, different from those in common use. These designated iron coins were either square or oblong with rounded edges, bearing the characters "Sendai-tsuho" (Treasure of Sendai) on the obverse (Fig. 4). With these devices the central government attempted to confine the designated coins to the Sendai fief and to prevent illegal exports to other fiefs.

CHART 2: Exchange rate indices showing the appreciation of gold/bronze coins relative to iron coins in Edo and Osaka from the early 18th century to 1868. The main three periods and the major places of issue of iron coins are marked. The impact of the excessive casting of iron coins is seen in the worsening (the rise) of the exchange rate, reflecting the inflation of prices as measured in terms iron coins caused by the over-issue of iron coins. Both markets, the Edo-market as well as the Osaka-market are affected, showing that there was good arbitrage between the two centres. The depreciation of iron coins clearly came to a halt whenever the casting of iron coins ceased, or, in case of the Sendai-fief, when its iron coins were cast in another shape, thus making it impossible to use the coins outside the fief's boundaries. However, when illegally cast iron coins not distinguishable from iron coins already circulating were brought to Edo in secret and put into circulation, there was a sharp rise in the exchange rate (i.e. iron depreciated) in Edo in 1796. Although the exchange rate in Osaka trended upwards fairly steadily during this period, there was no such sharp or distinctive rise.

(Source: Shinbo Hiroshi : Kinsei no bukka to keizai hatten (Prices in the Edo-period and economic development), pp. 175-177; Tokyo 1978)

CHART 2
EXCHANGE RATE INDEX SHOWING APPRECIATION OF GOLD/BRONZE COINS
RELATIVE TO IRON COINS ON EDO AND OSAKA MARKETS



At the Ishinomaki foundry, north of Sendai, about 380 million mon of square shaped coins were cast between 1784 and 1797. About 5% of the coins in circulation were iron coins (Seto 1957:168). To put the iron coins into circulation, and on the other hand to remove from circulation the bronze coins (which were usable for circulation throughout the whole country and therefore important for the official finances and the fief's monopoly trade), one bronze coin was exchanged for five iron coins of the square shaped Sendai-tsuho type. As in the Mito case, people refused the iron coins in Sendai, too, and special measures had to be taken to put these coins into circulation.

As a kind of "punishment" for a farmer's riot in 1797 - for which, according to Confucian thinking, the fief's feudal lord had been made responsible - the Sendai fief was charged with the costs and responsibility for the building of a canal in the capital Edo. Naturally the expenses for this project had to be paid with legal coins, as the Sendai-tsuho was not allowed to be exported and used outside the Sendai fief's boundaries. Once again the square shaped coins were cast as earlier at the Ishinomaki foundry, but as soon as the inspectors of the central government were out of sight, iron coins of the kind which were legal tender throughout the whole country and had been cast on behalf of the central government earlier, were quickly cast and secretly brought to Edo by ship (Polder 1891:485). As huge amounts of rice necessary for the capital's inhabitants were brought from Sendai to Edo in ships owned by merchants from the Sendai fief, it was not very difficult to smuggle the acceptable coins into the capital. By this method it was possible to minimise the costs of the forced building of the canal in Edo, thus providing Sendai with a secret revenge. Although the actions of the Sendai fief soon became known because of the extremely bad quality of their coins, charges of illegal casting could not be proved against the Sendai fief, as it was impossible to distinguish the legally cast coins from the illegally cast Sendai iron coins.

Also, despite the official limitation on the quantity permitted to be issued within the fief, the strength of the economy of Sendai and its expanding trade meant that usage of the square iron coins spread increasingly to other provinces. Consequently, the central government promulgated an order strictly prohibiting the use of iron coins cast by the Sendai fief in the year Bunka 3 (1806) (Kobata 1966:219).

After this second period of excessive casting of iron coins a longer pause followed, only interrupted by the central government's issue of iron coins in the year Tempo 6 (1835). The reason on this occasion, as previously, was a shortage of small coins in the provinces. The amount cast was not large, but it was sufficient to affect the exchange rate in Edo (see Chart 2). Also the Mito-fief was given permission to cast iron coins in the year Koka 1 (1844) to meet the increasing expenses of national defense within the fief. Their use was once more limited to the fief itself and this time the order was evidently effective because there was apparently no effect on the exchange rate in Edo.

Third period: The casting of iron coins was re-started for political reasons. When the first American consul assumed office in Japan in the year Ansei 3 (1856) a small number of Japanese ports were opened for the first time to foreign trade. However, the growth of foreign trade and the purchase of imports could only be achieved through the export of commodity money, which would adversely affect the hinterland around the respective ports. The feudal government therefore ordered new coins to be cast in the most northern port opened for foreign trade, Hakodate, so far mainly an outpost for the colonization of the island of Hokkaido with only a relatively small amount of trading. However, after 1850 the central government and even the fiefs started to build up their defenses against the western powers, and consequently copper prices rose sharply. Therefore the new coins in Hakodate had to be cast from iron again.



Fig. 4 : The square shaped "Sendai-tsuho"



Fig. 5 : Two types of the "Hakodate-tsuhō" with a round (left) and an octagonal (right) hole in the centre

In contrast with other Japanese coins these iron coins were of two kinds, one with a circular hole and another type an octagonal hole in the center. They were called "Hakodate-tsuho" meaning "Treasure of Hakodate" (Fig. 5; for details on the casting see Yanaga 1977). The circulation of these iron coins was restricted to the port of Hakodate itself and the surrounding area. The casting was very rough and diameters varied considerably. Initially coins of 21.5 mm in diameter were cast, and later another series of iron coins of 24 mm in diameter were cast. The reverse was bare with only the character an (meaning Ansei-period, because the coins were cast in the year Ansei 3=1856). During the following two years, about 100 million coins of this type were cast.

In Edo, but also in Sendai and other areas, the casting of iron coins of the Kanei-tsuho type was started again in the year Ansei 6 (1859). Initially, these coins had a nominal value of 1 mon. However, the very rapid inflation of that period made these coins nearly valueless in real terms so the government decided to cast more iron coins with a higher nominal value. Accordingly coins of 4 mon with a larger diameter (28-29 mm) were minted, but with the same characters as the smaller coin.

The first coins of this type with the higher nominal value were cast in the year Man'en 1 (1860) in Edo. This time the raw material was steel and the coins sparkled like silver. Although this coin was attractive for the public, it did not circulate for long. People could not understand why this coin was said to be worth four times the copper coins already in circulation, in view of the rapid rise in the copper price during the past few years.

Nevertheless, after 1866 larger iron coins of this type, with a nominal value of 4 mon were cast in even greater quantity by six feudal fiefs. These coins differed from the smaller 1 mon - iron coin not only because of their greater diameter, but also because of the wave patterns shown on the reverse and the character showing where the coin was cast.

2.4 The new technology and the casting of iron coins

In the last period in which iron coins were cast, some foundries could be differentiated from others by one important point. So far, iron coins had been cast in traditional, small shaft furnaces. In some cases there were up to 100 furnaces in one foundry. But now, in the fiefs of Nanbu and Sendai modern, western style charcoal blast furnaces were introduced into the foundries.

The main reason for the introduction of charcoal blast furnaces in Japan was a political one. After the defeat of China in the Opium War of 1840-42 and with the increasingly frequent appearance of foreign ships along the Japanese coast, the Japanese feudal government felt threatened by the advance of the western powers into the East Asian seas. This led to increased preparations for the defense of the country. As the price of copper was driven up, the feudal government and the fiefs tried to cast big guns, using iron (which was cheaper) instead of bronze. Traditional casting furnaces were too small to smelt the large amount of iron necessary for casting iron guns capable of matching western artillery. Therefore relying on foreign technology drawn from a Dutch manual, the Japanese began to build "reverberatory" furnaces in several places (i.e. furnaces designed so as to throw the heat back on the smelted ore). However the available supplies of iron ore or iron sand first used for smelting and casting soon proved insufficient, because they were bought from traditional furnaces which used iron sand as a raw material. The search for suitable raw material led to the discovery of a magnetite

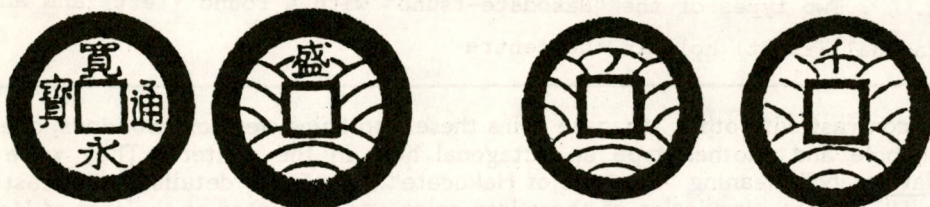


Fig. 6 : Iron coins with a nominal value of 4 mon cast after 1866. On the obverse the characters for "Kanei-tsūhō" as usual (far left) and three examples of the reverse with the characters mori (Morioka, the capital of Nanbu-fief), no, the character used by the Aizu-fief for its coins, and sen, the characters used by the Sendai-fief, all cast in 1866

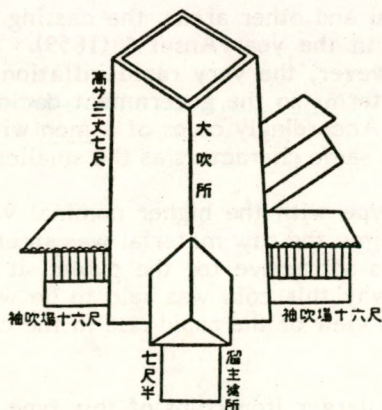


Fig. 7 : A drawing (dated 1868) of the charcoal blast furnace used at the foundry in Ishinomaki, the main foundry for casting iron coins in Sendai-fief.

ore deposit in Northern Japan. Guided again by imported Dutch technology charcoal blast furnaces were built in 1857 to exploit the magnetite ore. The success of the construction of such a furnace in Nanbu fief (two other attempts near Kagoshima and Hakodate failed in the same year) is important here, because it led to the construction of additional furnaces later used to cast iron coins. These early charcoal blast furnaces in Japan were the starting point for a modernized, western style iron- and steel-industry.

In the following years ten charcoal blast furnaces were built at five different locations within the Nanbu-fief (all of them near the present iron and steel plant of Kamaishi). These early furnaces only had a height of about six to eight meters. The total capacity of the furnace did not exceed 2500 tons a year. The first foundry for casting coins using pig iron from the furnaces in Hashino and Ohashi at the magnetite ore deposit was founded a short distance from the small village of Ohasama. Iron coins cast at this foundry bear the character mori (i.e. Morioka, the capital of the Nanbu-fief) on the reverse (Fig. 6).

Records reveal that iron coins without this character on the reverse were cast in large quantities, too, and sold to other fiefs. With the profits gained by these sales the Nanbu fief was able to enhance its revenues enormously. Initially the fief itself directed the foundry, and merchants from Morioka were forced to make loans for the operation of the foundry. Nearly 1,100 men were employed in this foundry, suggesting a high degree of specialisation of labour, which was to become the hallmark of early modern factory systems. Specialists in casting and moulding were called from Osaka and Edo, but the craftsmen and day-labourers came from the surrounding villages. As production costs amounted to about 18 million mon a month and the production of iron coins usually approached 24 million mon a month, the fief's profit was approximately 6 million mon, equivalent to just over 900 ryo at the official gold-exchange rate.

The extraordinary expansion of the money supply in Nanbu precipitated riots by the farmers, exactly as had occurred 80 years before in Mito-fief. The farmers blamed the permanent influx of iron coins used by the fief government to overcome the fiscal deficit for the galloping inflation. During the riot they burnt down the foundry, but nevertheless they failed to prevent the fief from casting iron coins for a new foundry was built immediately, this time near the charcoal blast furnaces in the mountains close to the magnetite ore deposit. From 1868 onwards foundries for casting iron coins were established in rapid succession at all existing charcoal blast furnace sites. In Hashino for example, about 1000 labourers were employed. Iron coins cast there bore no character on the reverse, so the coins could be sold to other fiefs, too. The three charcoal blast furnaces in Hashino had a production capacity of nearly 1,000 tons of pig iron a year. An amount of nearly 35 million mon was earned by the fief in profits from casting and selling iron coins. The technique of casting coins and operating the charcoal blast furnace had made such progress at this foundry that the pig iron tapped from the furnace was fed directly into the sand moulds, thus saving a considerable amount in time and costs of production.

Three other foundries established nearby were considerably smaller, usually with only one charcoal blast furnace and about 250 to 600 labourers (for details see Mori 1957:77 and 136-146).

The success of casting coins directly from the furnace, and the profit made by the Nanbu fief encouraged the neighbouring Sendai fief to erect two charcoal blast furnaces at two magnetite ore deposits within its fief in the year Bunkyo 3 (1863). From the pig iron derived from these two furnaces, an amount of nearly 180 tons subsequently was used for casting iron coins in the fief's foundry at Ishinomaki between 1866 and 1868 (Mori 1970:264; Miyagi-ken 1968: 9:470). In order to save costs by pouring the tapped molten iron directly from the furnace into the coin moulds as in Nanbu-fief, Sendai-fief ordered the building of two new furnaces, each 11 metres in height near the Ishinomaki foundry in 1868 (Mori 1970:272; see the contemporary drawing of this furnace in Fig. 7).

But soon after completion, the Meiji-Government, which had gained power in 1868, strictly prohibited the casting of iron coins, thus putting an abrupt end to the history of the production of iron coins in Japan.

3. IRON COINS IN THE MEIJI-ERA

After taking over the mintage prerogative the new Meiji-Government decided to continue using the iron coins for a transitional period of 30 years. But it also decided to establish a modern coinage and to create a new silver currency unit, the Yen.

After 1872 about 4000 iron coins with the nominal value 4 mon and about 8000 pieces with the nominal value of 1 mon were exchanged for 1 Yen of the new currency. Although the value of the iron coins was quite low, records reveal that in 1872 there was popular resistance to the government's plans to lay rails made of iron for the construction of railways. Since the rails were made from the same metal as the coins, people feared that this would depreciate the iron coins still in circulation (Idditie 1956:123). This belief may have been held in the countryside, but reports from foreigners (Bramsen 1880:27), living in the urban areas at this time tell us that the iron coins were rarely circulated, because the value of the iron coin as money was much lower than the same amount of iron coins sold as scrap iron. But the evidence is contradictory. At the same time other reports (i.e. White 1880:176) show that a small amount of food or low-priced commodities could still be bought and paid for with the iron coins. Usually, however, as White admits, iron coins were mainly to be found as offerings in shrines and temples.

4. SUMMARY

During the Edo-period in Japan the ordinary people practically never used gold coins as hand-to-hand currency, whereas silver coins were used quite often. Only bronze coins with a low nominal value were widely used as a subsidiary coinage. Bronze and later iron-coins were the main legal tender. Although, a huge amount of iron coins was cast, the influence on the general price level of Japan measured in gold or silver was not great because, despite the huge amount cast, this amount was but a small part of the overall money supply. The debasement and re-casting of gold and silver coins of various denominations and the printing of paper currency (hansatsu) influenced the money supply much more than the casting of iron coins.

Nevertheless, the extensive issue of iron coins caused significant problems to people in certain specific local areas, especially when the circulation of iron coins was restricted to a limited area, mostly within one fief's boundaries. The results, described in the examples mentioned earlier, are good illustrations of the operation of Gresham's law at work (i.e. "bad money drives out good" when there is an artificially fixed exchange rate between the 'good' and 'bad' money). Both bronze and iron coins had a nominal value of 1 mon, later 4 mon, but in the long run bronze coins disappeared (i.e. were hoarded) and the value of the iron coins dropped as they were passed from hand to hand.

The connection between casting and issuing huge amounts of iron coins and the deterioration of the exchange rate for iron coins because evident to responsible politicians in the central government and also in various feudal fiefs. This was probably the reason for the ultimate general prohibition on the casting of iron coins after 1774. The perception of this connection might have been one reason why later on permission was given by the central government only to particular fiefs to cast iron coins. This was usually coupled with the condition that circulation of the coins be limited to the area within the boundaries of the fief responsible for the issue of the coins. In that way, it

was hoped to confine the problems emerging from an excessive issue of iron coins to a limited area. The rapid growth of trade and the spreading use of money for settling transactions meant that coins had already begun to displace rice as the most important medium of exchange. Therefore the financial problems of one fief could no longer be limited to any particular area and soon one fief's problems became the problems of the neighbouring fiefs. Despite the belief that money was the most degrading element in society, a belief still accepted among the ruling samurai class in the late Edo-period, some feudal lords tried to solve their financial problems by casting great quantities of poor quality iron coins, with little concern for the people affected by the resulting inflation. Invariably these lords failed to solve their fiscal problems, and only inflicted harm on the day-labourers and other classes whose nominal income was fixed in terms of iron coins.

In Section 2 an interesting paradox was observed: the application of the most modern technology available - the charcoal blast furnace - at once solved the problem of production of iron coins, but in doing so enabled output to expand so enormously that even the small residual value of iron coins was finally destroyed by the excess of supply.

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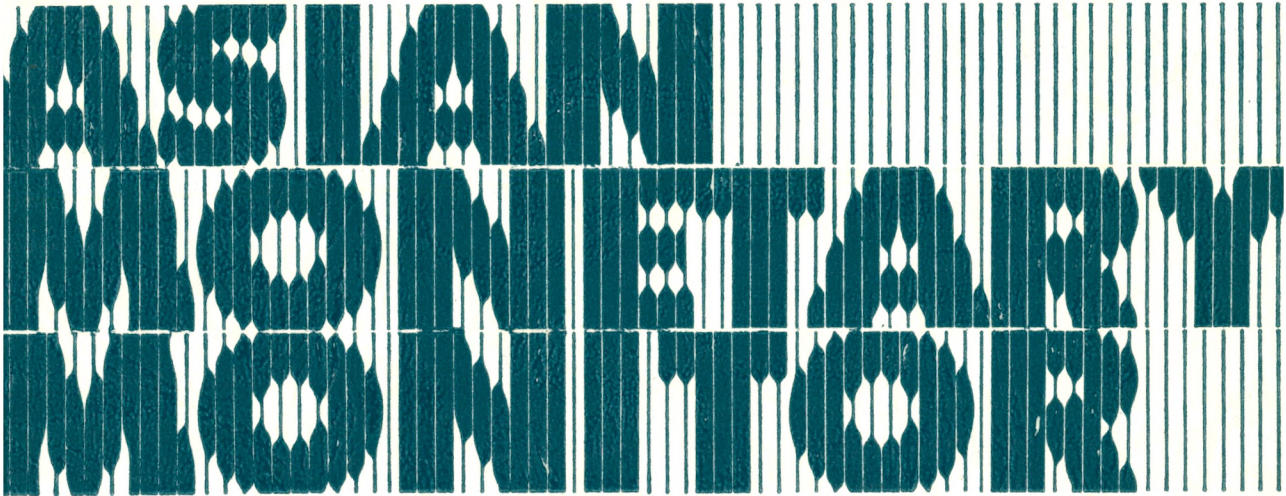
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ASIAN MONETARY MONITOR

is published by
Asian Monetary Monitor Ltd.,
P.O. Box 30724, Causeway Bay,
Hong Kong.



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Asian Monetary Monitor is a bimonthly publication specialising in the analysis of economies along the Asian Pacific Rim. Sold by subscription only, price US\$200 p.a. inclusive of air mail delivery to any part of the world. Correspondence and subscriptions should be addressed to The Editor, Asian Monetary Monitor Ltd., P. O. Box 12964, G.P.O., Hong Kong.

EDITOR:

John G. Greenwood

M.A. (Hons) Econ. Edinburgh
Research Economist, University of Tokyo
Economist at G.T. Management (Asia) Ltd.

**CONTRIBUTING
EDITORS:**

Hugh P. Sloane

B.A. Econ. Bristol
M. Phil. Econ. Oxford
Economist at G.T. Management (Asia) Ltd.

Tim J. Lee

B.A. Econ. Cambridge
Economist at G.T. Management (Asia) Ltd.

**CHARTS AND
STATISTICS:**

S.Y. Chan

Michael Wong

ADMINISTRATION:

Isabella Ling

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ASIAN MONETARY MONITOR

May-June 1985

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KEY TO SYMBOLS USED IN THE CHARTS

% RP - Percentage Rate of change over Preceding period.

% RS - Percentage Rate of change over Same period of preceding year.

SA - Seasonally Adjusted.

SAAR - Seasonally Adjusted at Annualised Rate.

REGIONAL SURVEY

TRENDS IN INCOME VELOCITY IN 8 EAST ASIAN ECONOMIES

The naive version of the quantity theory of money holds that there is a strict proportionality between the nominal quantity of the commodity regarded as money and the overall level of prices. However it is widely recognised by economists that this statement is a gross oversimplification, firstly because any increase in the quantity of money which is matched by an increase in the volume of economic activity or output is commonly understood not to result in higher prices, and secondly because there are a variety of factors affecting people's willingness to hold money which can significantly alter the relation between changes in the quantity of money and changes in the price level.

In the developing countries of Asia the growth of output has generally been very rapid, averaging 7.6% p.a. from 1970-1984 for the 8 economies included in this survey, so that this much of the growth in the quantity of money has been absorbed by increases in real economic activity or final expenditures without price inflation. Also, the quantity of money that individuals in each country have wished to hold relative to their income has varied substantially over time as economic conditions have altered. For example, in countries with persistent or widely anticipated inflation, such as South Korea in the years up to 1964 and then from 1972 to 1981, or Indonesia from 1961 to 1968, there was a marked reluctance to hold money, which tended to raise inflation to rates even higher than one would have expected from a naive quantity theory relation. Conversely, in the same two countries when inflation finally came down, and people's expectations adjusted to the new low inflation conditions, there was a renewed willingness to hold money balances, which tended to mean that increases in the quantity of money were not as inflationary as one would have expected from the simple quantity relationship.

The broad relation between the quantity of money and aggregate spending is summarised in the concept of income velocity, or the average number of times that each unit of money is spent during a given time period. In times past there was much discussion in the economic literature as to the appropriate definition of both the numerator (spending, income, or output) and the denominator (money) in the measurement of velocity, but nowadays it is generally accepted that nominal GNP or GDP is the suitable measure of income to use (income being in turn a proxy for wealth), while cash currency, M1 (cash currency plus demand deposits held by the non-bank public), or M2 and/or M3 (M1 plus time and/or savings deposits) are suitable measures of money. This article adopts these conventional measures, except that for Hong Kong since December 1980 it seems more appropriate to use HK\$M3, this measure being closer to the pre-1981 measure of M2 than M2 as subsequently defined.

When nominal GNP is compared with a broad definition of money (M2) in the developing economies of East Asia, a striking result is obtained (see Chart 1). With the single exception of the Philippines where velocity has fluctuated in the range 4.5-6.5 between 1961 to 1984, velocity in every other country has shown a strong downward trend. In other words, the amount of spending or income per unit of money has declined consistently in all cases (except for the Philippines), or conversely, the amount of money that individuals have wished to hold in relation to total spending or income has apparently exhibited a persistent rise.

In the case of Indonesia this has only been the case since the end of the hyperinflation of the mid-1960s, the rise in velocity from 1960 through 1966 being due to the rise in inflation and the associated distrust of Indonesian paper money or bank deposits. The rise in velocity (i.e. the determination of individuals to hold less money) in Korea up to 1964 reflected a similar episode of serious inflation when wholesale price

CHART 1
INCOME VELOCITY (V2, V3) IN 8 EAST ASIAN ECONOMIES

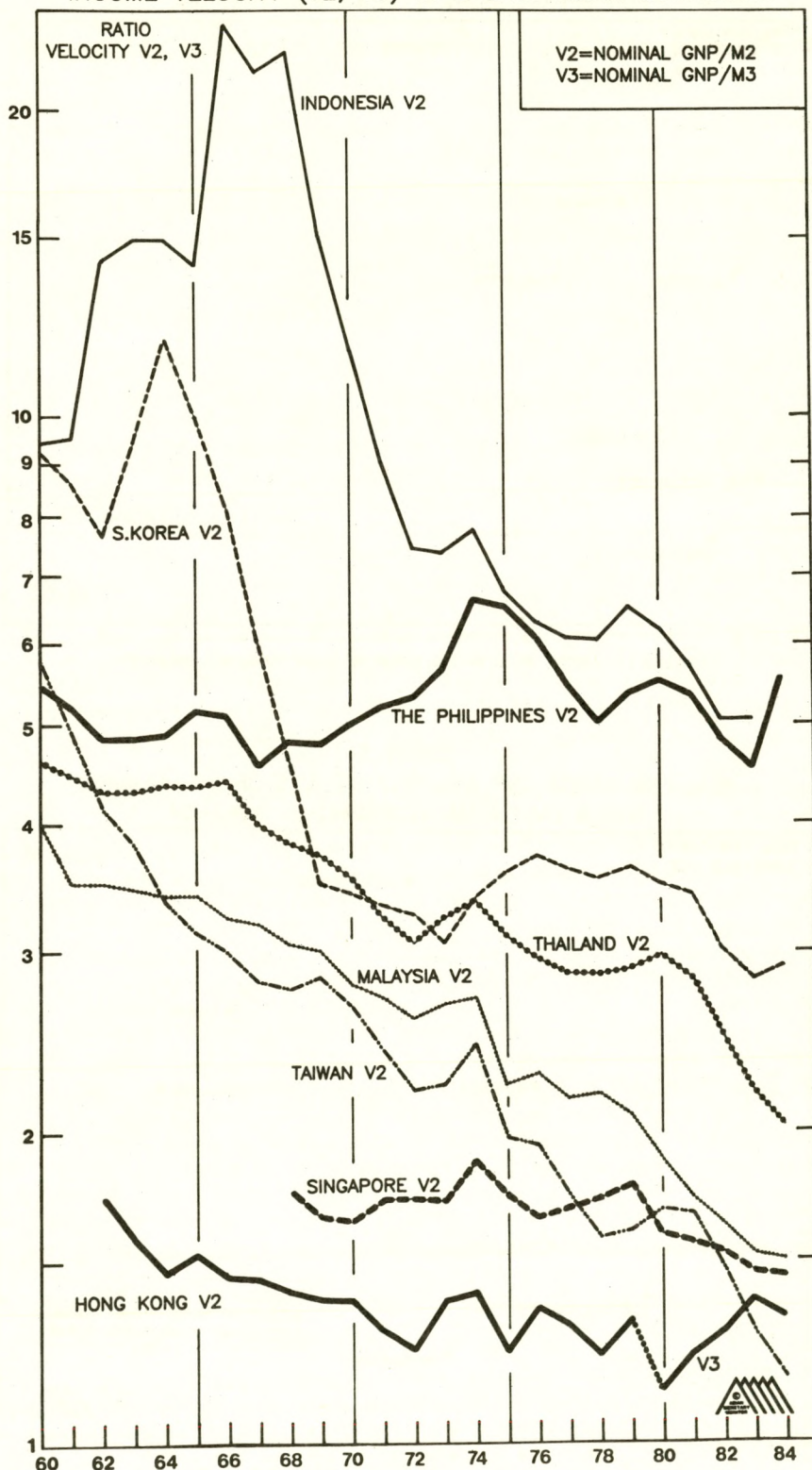


CHART 2
REAL PER CAPITA GDP AND RELATIVE SIZE OF CASH CURRENCY HOLDINGS
FOR 8 EAST ASIAN ECONOMIES IN 1982-84

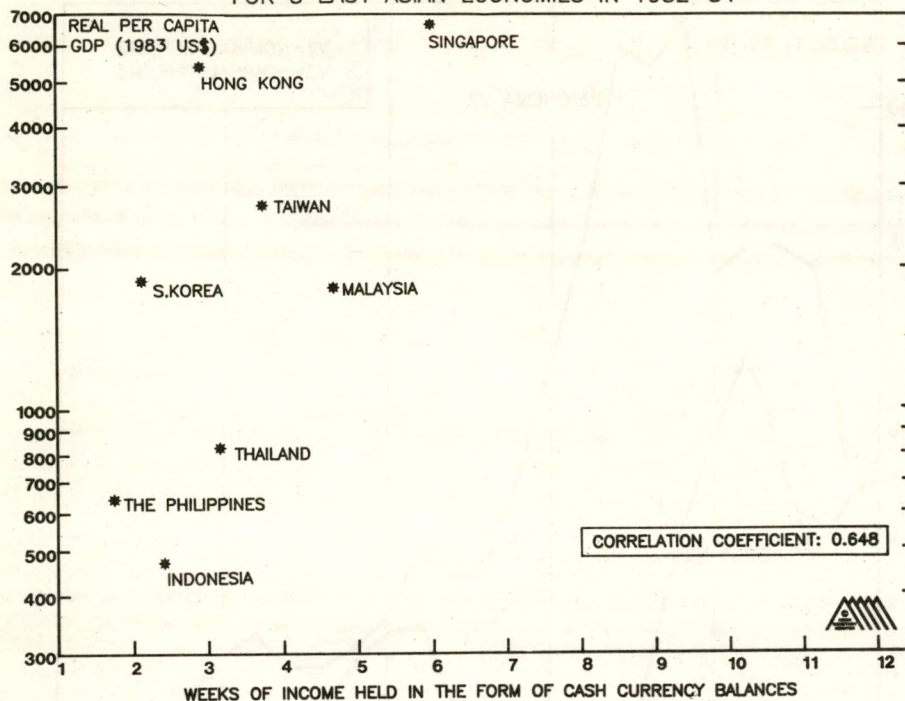


CHART 3
REAL PER CAPITA GDP AND RELATIVE SIZE OF M1 HOLDINGS
FOR 8 EAST ASIAN ECONOMIES IN 1982-84

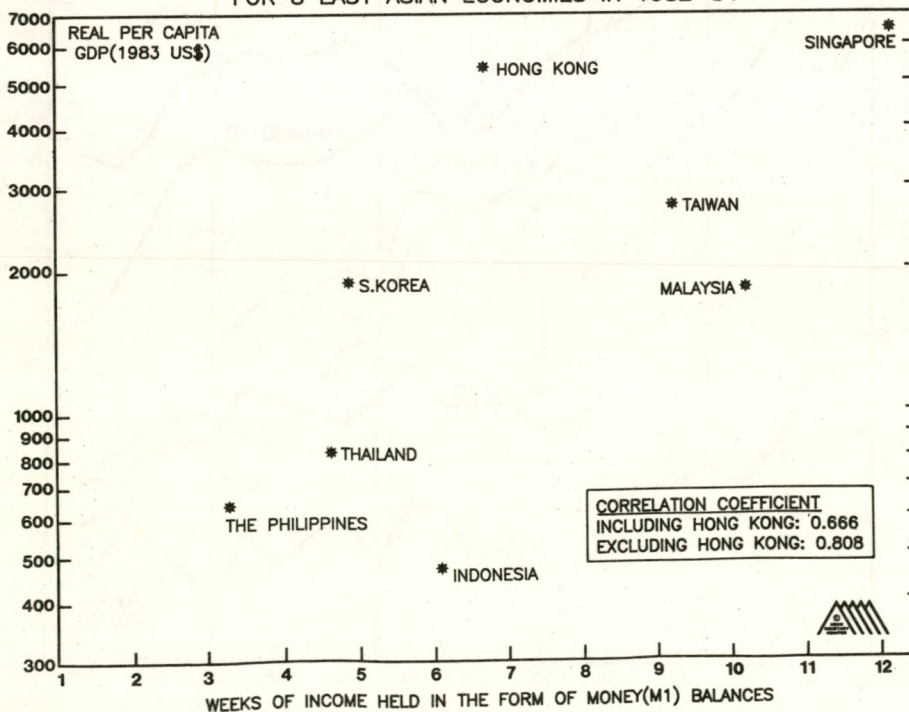


CHART 4
REAL PER CAPITA GDP AND RELATIVE SIZE OF M2 HOLDINGS
FOR 8 EAST ASIAN ECONOMIES IN 1962-64

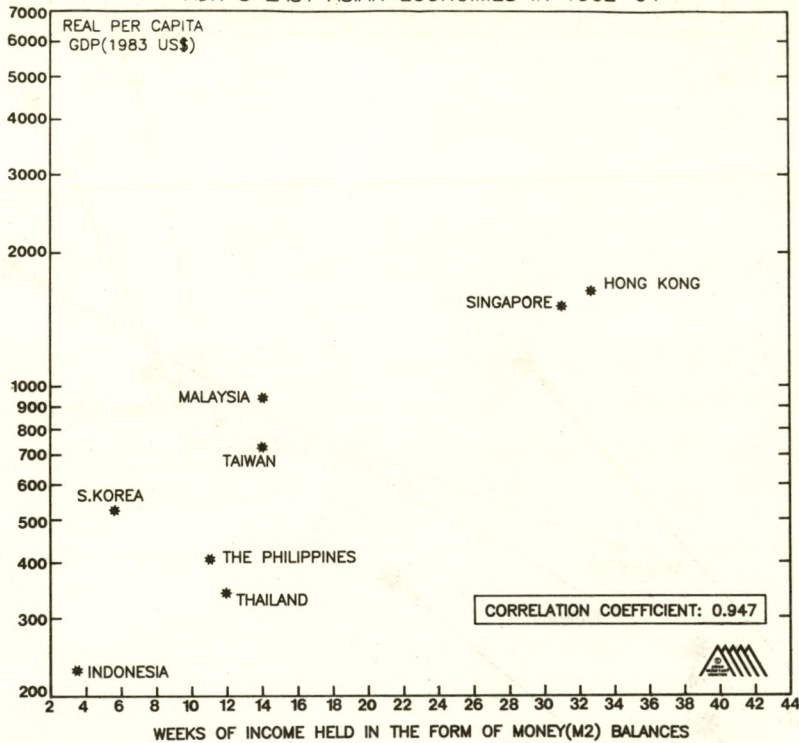


CHART 5
REAL PER CAPITA GDP AND RELATIVE SIZE OF M2 HOLDINGS
FOR 8 EAST ASIAN ECONOMIES IN 1982-84

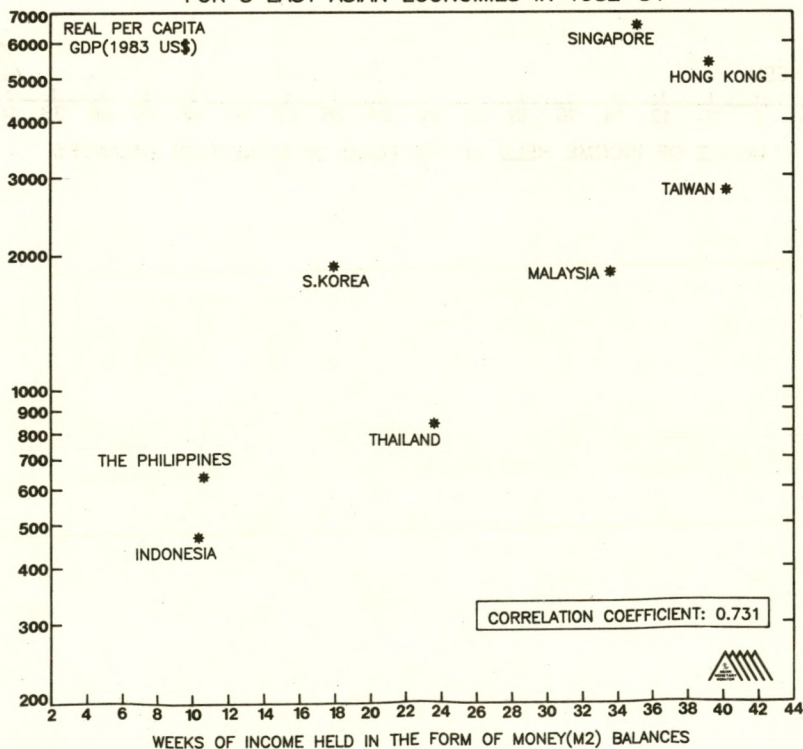
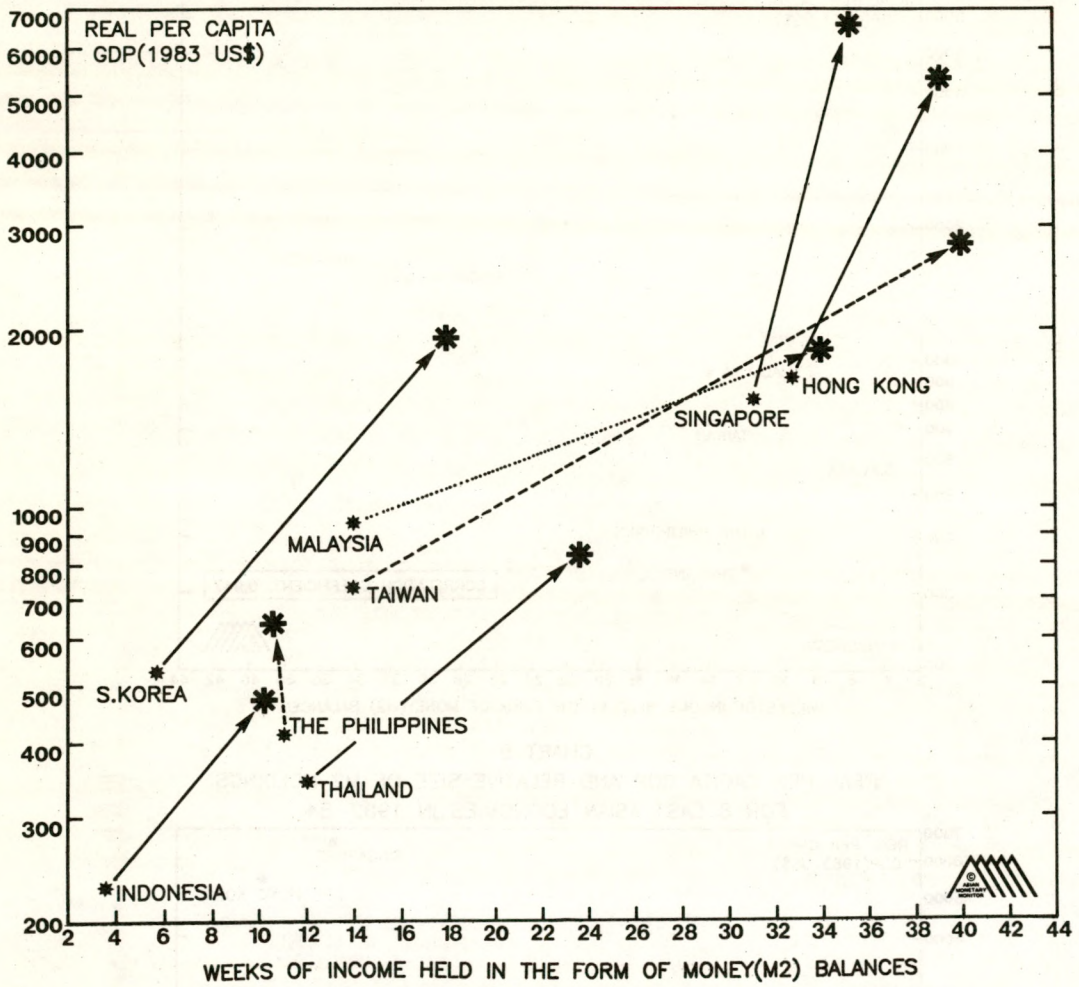


CHART 6

CHANGE IN REAL PER CAPITA GDP AND CHANGE IN RELATIVE SIZE OF M2 HOLDINGS FOR 8 EAST ASIAN ECONOMIES BETWEEN 1962-64 AND 1982-84



inflation peaked at over 64% and consumer prices rose by 56% in the year to May 1964. In both the Indonesian and Korean cases velocity has declined steeply following the end of these severe inflationary episodes, and at a more steady rate subsequently.

The table below shows the average rates of change in income velocity in each of the 8 countries. In Taiwan and S. Korea where real income growth has been very rapid, velocity has fallen most rapidly, suggesting that there may be some inverse relation between the rate of change of velocity and income growth. Expressed in another way, as income has risen, the quantity of money (M2) that individuals have wished to hold relative to their income has actually increased.

TABLE 1
RATES OF CHANGE OF M2 VELOCITY IN 8 EAST ASIAN ECONOMIES, 1960-84

	<u>M2 Velocity</u>
Taiwan	-6.5
South Korea	-4.7
Malaysia	-4.0
Thailand	-3.3
Indonesia	-2.6
Hong Kong*	-1.2
Singapore*	-1.2
Philippines	+0.03

* Hong Kong data are for 1962-84; Singapore data are for 1968-84.

This proposition is illustrated further in Charts 2 to 6 which measure along the horizontal axis the average quantity of money held in each economy according to the number of weeks of income it represents. Charts 2 and 3 show that there is a strong positive relation between the level of income (on the vertical axis) and how much money individuals hold (on the horizontal axis). Charts 4 and 5 show the same relation over a period of time. Thus for example in Chart 4 during the period 1962-64 Hong Kong residents held money balances amounting to almost 34 weeks of income, but by 1982-84 in Chart 5 the quantity of money balances held had risen to nearly 40 weeks of income, and so on for each economy. Chart 6 connects points in Chart 4 with points in Chart 5, and essentially restates the basic point made above, namely that as real per capita income levels (on the vertical axis) have risen, the level of money balances held relative to income (on the horizontal axis) has also risen. The only exception again is the Philippines where recent political events have constituted a significant deterrent to the build-up of financial assets. For all the other economies in the Asian Pacific rim there has been a strong growth of money balances relative to income.

In Hong Kong and Singapore there has been less movement along the horizontal axis (in Chart 6) than there has been up the vertical axis, and it is worth considering some of the factors behind this phenomenon. One possible explanation is that in each economy there is sufficient financial freedom to permit individuals to accumulate other types of financial assets as well as cash and bank deposits. In Hong Kong, for example, although the range of domestic financial assets available is quite limited, many residents hold substantial portfolios of financial and real assets outside Hong Kong. A second possible explanation is that technological changes have made it feasible in recent years for individuals to hold relatively less money as their incomes have risen. There has been a rapid diffusion of credit cards and ATMs or Auto-Teller Machines, which have given bank customers 24-hour access to cash at convenient locations so that they may have become able to manage with smaller cash inventories. In Asia that diffusion has been greater in Hong Kong and Singapore than elsewhere since these cities have concentrated

populations and high per capita incomes, and hence are well suited to investment in such facilities. (Japan has also seen rapid diffusion of ATMs and credit cards, but Japan is excluded from this survey.)

Turning to M1 income velocity, or the ratio of GNP to M1, we can divide the 8 developing countries of East Asia surveyed here into two distinct groups: those where the trend of income velocity has been falling or stable, and those where the trend of income velocity has been rising. Rather than present the data all on one chart they have been divided into Chart 7 for falling or stable M1 velocity countries and Chart 8 for rising M1 velocity countries. With the exception of Taiwan and Hong Kong M1 data are not available until the late 1960s, and therefore the table below compares the rates of change of M1 velocity only from 1970.

TABLE 2

RATES OF CHANGE OF M1 VELOCITY IN 8 EAST ASIAN ECONOMIES, 1970-84

Indonesia*	-3.8% p.a.	Singapore	+0.8% p.a.
Taiwan	-1.8	Thailand	+3.0
Malaysia	-1.1	Philippines	+3.5
S. Korea	+0.4	Hong Kong	+6.1

* Data for Indonesia are 1970-1983.

In Chart 7 the declining trend of velocity is punctuated by several episodes of cyclical fluctuations, the most notable being the deviation below trend in 1970-73 and the sharp rebound upwards in 1974. This is followed by a milder episode of declines in 1975-78, succeeded by another but smaller upward reversal in 1979-80.

The strong downward trend in Indonesia from 1969 reflects a continuation of the recovery in demand for real money balances following the period of hyperinflation in the mid-1960s. With more stable income growth and falling inflation through the 1970s, the Indonesian population has been willing to build up its holdings of bank deposits and cash. By comparison with other countries in East Asia the level of Indonesian velocity (9.3) is still high, suggesting that the banking habit is still not widely accepted in that country. Since 1974 there has been a perceptible flattening of the trend, but we would expect Indonesian M1 velocity to continue to decline at close to 3% p.a. for several more years.

Taiwan is in some senses a similar story to Indonesia. Under the pre-1949 administration there had been a genuine hyperinflation, causing people to distrust paper money and low-interest bearing deposits, and pushing velocity to an extremely high level. With the advent of stable prices under a fixed exchange rate and rising real incomes, the trend has been strongly downward for many years, but since the second oil crisis (1979-80) there has been a definite change in the trend towards flat or possibly even rising velocity. It will require a few more years of data to see how the trend for Taiwan's M1 velocity will settle.

Malaysia and Singapore also showed a declining trend of M1 velocity until the second oil crisis. In Malaysia that trend appears to have continued subsequently while in Singapore the trend seems to have shifted to an upward path in the past 6 years. The basic factors underlying the stable velocity pattern in both economies are relative price stability and buoyant economic growth over the past two decades. As mentioned earlier, the rapid diffusion of credit cards and ATMs in Singapore in recent years could have affected the demand for cash and demand deposits, and these developments could explain the apparent move towards an upward trend of Singapore's M1 velocity, but this conclusion must necessarily remain tentative at present.

CHART 7
INCOME VELOCITY (V1, STABLE OR FALLING)
IN 4 EAST ASIAN ECONOMIES

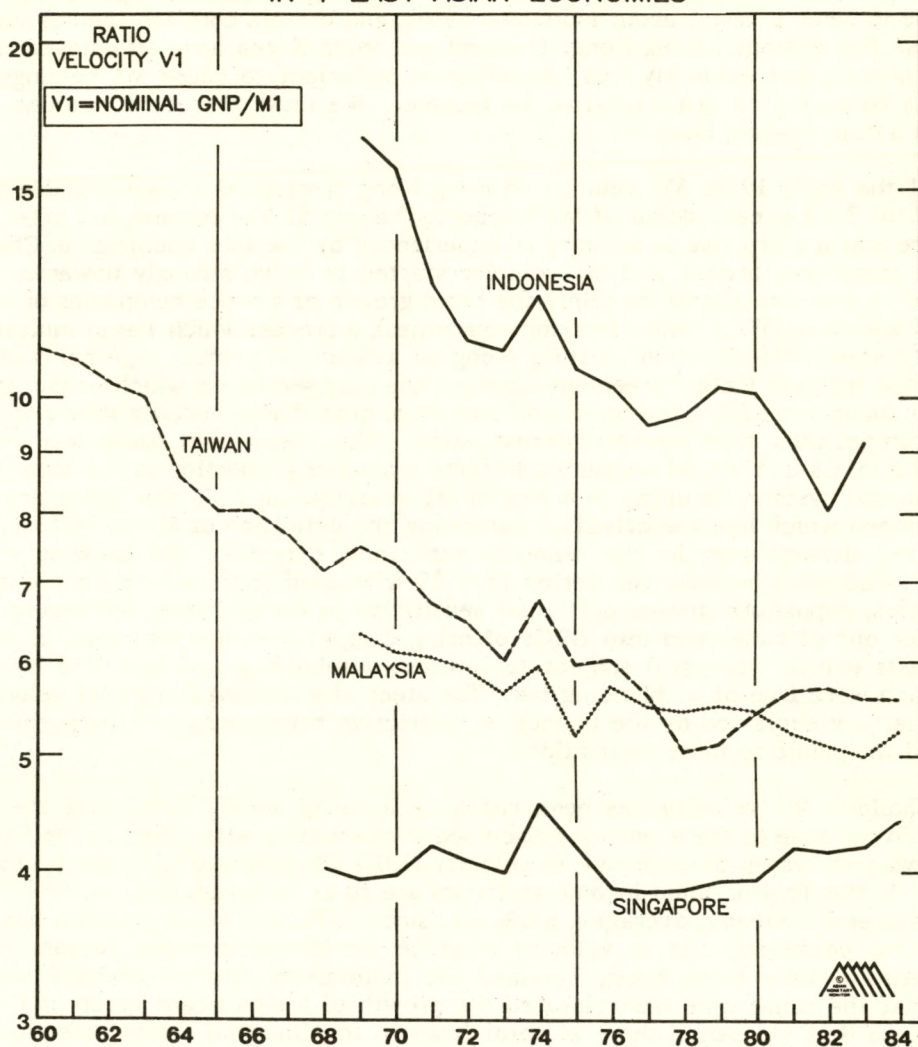


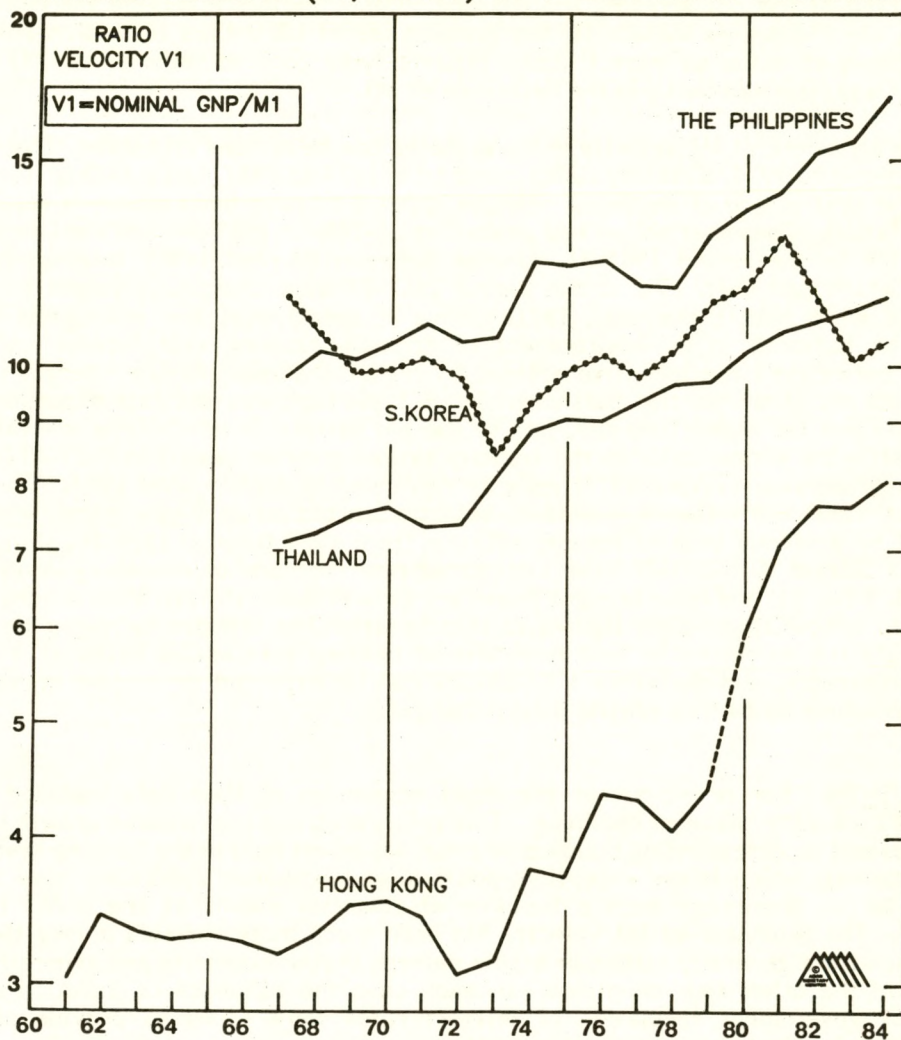
Chart 8 shows M1 velocity in four economies where the general trend has been upwards. As with the group where M1 velocity was generally falling we can only hypothesise in general terms about individual cases, and certain common themes suggest themselves. For example, Hong Kong, Thailand and South Korea have all enjoyed strong economic growth, but evidently this has not been sufficient to cause M1 holdings (i.e. transaction balances) to grow relative to income. We must therefore examine each country on a case-by-case basis.

Until the early 1970s M1 velocity in Hong Kong fluctuated around a stable trend level of about 3.4 i.e. each dollar of M1 "supported" about \$3.4 of income, but after 1974 (when there was a sharp rise in velocity as experienced by the four countries in Chart 7) the stable trend was broken and M1 velocity started to move strongly upwards. One contributor to this was almost certainly the rapid growth of finance companies or quasi-banks, now known as DTCs (deposit-taking companies), a process which was stimulated by the growing internationalisation of Hong Kong as a financial centre, together with the effect of the Interest Rate Agreement amongst the licensed banks which encouraged a transfer of funds away from the banks and into these quasi-banks because they were able to offer competitive, free market interest rates. This meant that banks lost market share to the DTCs and M1, as measured, became a smaller proportion of the total funds in the financial system, resulting in a rise in M1 velocity. In 1980 new monetary data were developed which had the effect of narrowing the definition of M1 to HK\$M1, thus reducing the denominator in the velocity ratio and extending the upswing in M1 velocity. In addition because the period 1979-80 witnessed unprecedented increases in interest rates, depositors showed particular sensitivity to higher rates, and moved their funds either out of banks and into DTCs offering competitive interest rates, or out of HK\$ deposits (which were still subject to interest withholding tax) into US\$ balances abroad which were free of withholding tax. The steep rise in Hong Kong's M1 velocity is therefore largely explained by the impact of restrictive regulations and the predictable response of the public to those restrictions.

In Thailand M1 velocity has been rising on a fairly steady path since the mid-1960s. As in the case of the economies discussed in connection with Chart 7, the 1970-74 business cycle shows up as a decline in velocity (1970-72) followed by a steep increase (1974-75). If the Thai national income statistics are to be believed, real income growth has been extremely steady, averaging 6.8% p.a. since 1970, and since inflation has been moderate the persistent rise in velocity must be attributed to other factors in the banking sector. Like Hong Kong, Thailand has maintained controls on bank interest rates, but at the same time has tolerated the growth of a significant group of finance companies, so that the banks' share of total funds in the financial system has gradually been eroded. The steady rise in velocity is therefore probably due to the distortions produced by the controls on interest rates. Up to the late 1970s Thai bank interest rates were set at below-equilibrium levels, and this encouraged substantial fund transfers from banks to the finance company sector. Subsequently, after the collapse of the finance company sector in 1978-79, Thai bank interest rates were raised to higher-than-equilibrium levels so that although funds flowed back to the banking sector they were held in time deposit accounts, rather than in non-interest bearing, demand deposit accounts. Hence both in the heyday of finance company growth up to 1979 and subsequently on account of the exceptionally high interest rates available on ordinary 1-year time deposits there were strong disincentives to holding transaction balances at Thai banks, and hence M1 velocity has been persistently rising.

M1 velocity in the Philippines has also been on a steady upward path, but the level has always been 3-4 points higher than in Thailand. This may reflect differing definitions of money in two economies where real per capita incomes have been very similar for over 20 years (see chart of Real Capita GDP in AMM Vol. 9 No. 1, p. 9). In recent years (since 1978) M1 velocity in the Philippines has risen more steeply as inflation has risen and as the political crisis has deepened. In technical terms the demand for real money balances has declined as inflation has risen. Even the reform of Philippine bank interest

CHART 8
INCOME VELOCITY (V1, RISING) IN 4 EAST ASIAN ECONOMIES



rates in 1980-81 has not arrested the upswing. Other factors affecting the demand for money in the Philippines include (1) the growing use of US dollars for both transactions and as stores of value as more Filipino citizens have gone to work abroad, (2) higher inflation, and (3) a narrowing in the definition of M1.

The behaviour of M1 velocity in South Korea can be divided into three clear phases: a falling trend to 1973, a steeply rising trend from 1974 to 1981, and a falling trend since 1981. The first period of declining velocity appears to have been mainly a response to lower inflation. Consumer prices had peaked at 25-26% in 1963-64, and then declined to around 10% in the period 1965-71, ranging between 6% and 14%. Interest rates on deposits which had been 15% in the period 1962-65 were drastically raised to 26% in 1965, and were held there until 1971. Thus it seems that the willingness to hold transaction balances in an environment of strongly growing real income and lower inflation outweighed the incentive offered by higher-than-equilibrium interest rates to move funds out of transaction balances. In 1971 the high interest rate experiment was terminated and the authorities returned to the old pattern of artificially low rates, but because M1 - the denominator in the velocity ratio - grew so rapidly in 1972-73 (peaking at 62% year-on-year in April 1973) velocity continued to decline until 1973. Thereafter as nominal GNP and inflation exploded, velocity started on an 8-year climb which was sustained by a second bout of serious inflation from 1978 through 1979-80. Since 1983 the South Korean authorities have introduced new methods of monetary control (see AMM Vol. 8 No. 1), and have brought monetary growth down sharply from around 30% in 1979-82 to almost single-digit figures so that inflation has dropped to negligible levels. Accordingly the incentive to hold non-interest bearing transaction balances will have risen considerably, and therefore M1 velocity can be expected to decline in the years ahead - assuming no further drastic policy changes.

CONCLUSION: For seven out of the eight economies of East Asia included in this survey, M2 velocity has been declining. This reflects strong real income growth in these economies and a corresponding build-up of financial assets held in the banking system. In the Philippines, which is the exception, political and economic conditions have been so unstable as to discourage such a build-up of financial claims at the banks in local currency. The behaviour of M1 velocity has been much more variable among the eight countries, with a generally falling or stable pattern in four countries and generally rising velocity in the other four countries. In each case the influence of inflation and the impact of government regulation of interest rates were found to provide plausible explanations for the behaviour of M1 velocity.

Insofar as a stable pattern of velocity or predictable velocity is necessary for the conduct of a policy of discretionary monetary control, these eight economies of East Asia appear to exhibit sufficient consistency in the behaviour of velocity to enable the authorities to pursue a policy of controlling the money supply. In practice all of these 8 economies pursue a policy of fixing or managing the external exchange rate, and therefore over time the monetary growth rate must be whatever is required to maintain equilibrium in the balance of payments. This means that given the policy of exchange rate control, monetary control is not within the discretionary power of the authorities except to a very limited extent, and/or is conditional upon exchange rate objectives. Nevertheless, if there was a need to shift from a policy of passivity towards active control of the money supply, this survey suggests that the factors affecting velocity in these 8 countries are sufficiently similar to permit the authorities to have confidence in the "functional" stability of velocity. Conversely there appears to be no case for saying that velocity is random and therefore adoption of a money-supply control policy is not feasible.

AUSTRALIA

THE OUTLOOK DETERIORATES

The Australian economy has recovered strongly over the last two years. Real GNP rose 6.2% in 1984 up from 1.6% in 1983. In the year to June 1984, real GNP in Australia rose by nearly 10% or faster than in any other economy in the OECD. The revival in economic activity has been associated with an impressive decline in inflation to an underlying rate of approximately 5 1/2%, or less than half the peak 12.3% rate recorded in 1982. Nevertheless, the Australian economy's recovery in this business cycle appears to have been unbalanced. The recovery has been dominated by stronger growth in personal and government consumption. Aside from a comparatively brief period in the first half of 1983, when exports of agricultural goods rose sharply, the Australian economy has not benefited from any marked improvement in net exports. Similarly, with the exception of expenditure on housing and construction, investment spending has yet to recover significantly from the depressed levels of 1982.

However, the main danger to sustained recovery in Australia lies not so much with the apparent imbalance in the sources of real growth as with the fact that the fundamental forces underlying the recovery have led also to a marked deterioration in other indicators of well-being. There have, in short, been considerable costs to recovery in the Australian economy.

Perhaps the most obvious deterioration in the Australian economy has been in the external sectors. Whereas Australia has had one of the stronger recoveries in the OECD over the last year this has been associated with a very substantial increase in the current account deficit. Australia's current account deficit currently amounts to almost 6% of GNP. This compares with the widely chronicled current account deficit in the US which amounts to less than 3% of national income. The poor competitiveness of the Australian economy and the local currency is underlined by the fact that there has been only a minimal increase in Australian exports to the US over the last two years, in spite of a strong US recovery and a substantial appreciation in the US dollar. Australia appears to be the only economy that maintains a trade account deficit with the US. As is illustrated in Table 1, Australia is unusual in that its bilateral trade position with the US has not improved since 1980.

Table 1

US Bilateral Trade Balance

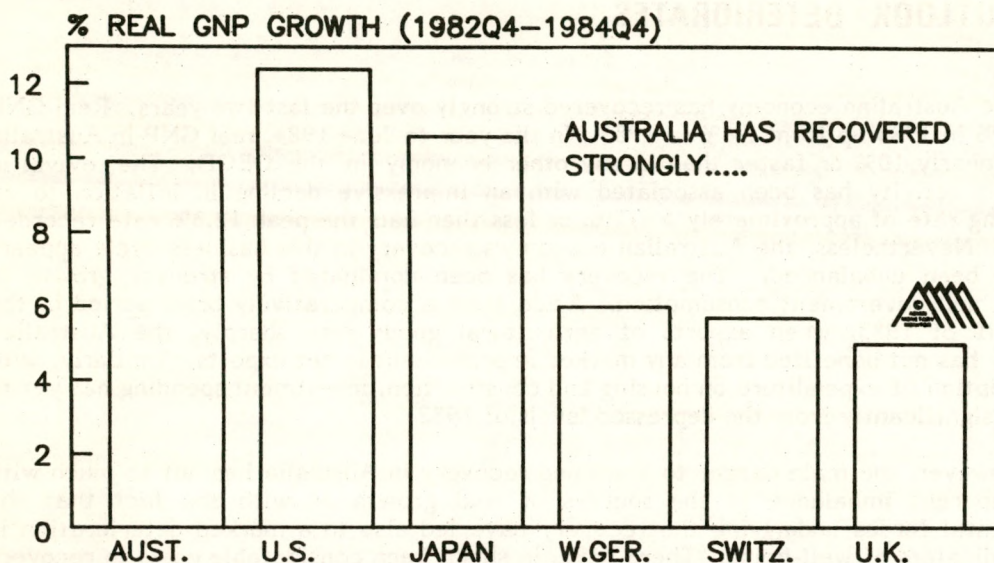
	1984	Change since 1980	US Imports % Change 1980-84
Total	-123.3	86.9	33
OECD	-72.9	-72.8	59
Canada	-20.6	-14.0	60
Japan	-37.0	-25.0	84
W. Europe	-17.1	-37.7	53
OPEC	-13.7	23.2	-49
Australia	1.1	0	3

US\$ billions

Source: Morgan Guaranty Trust Company

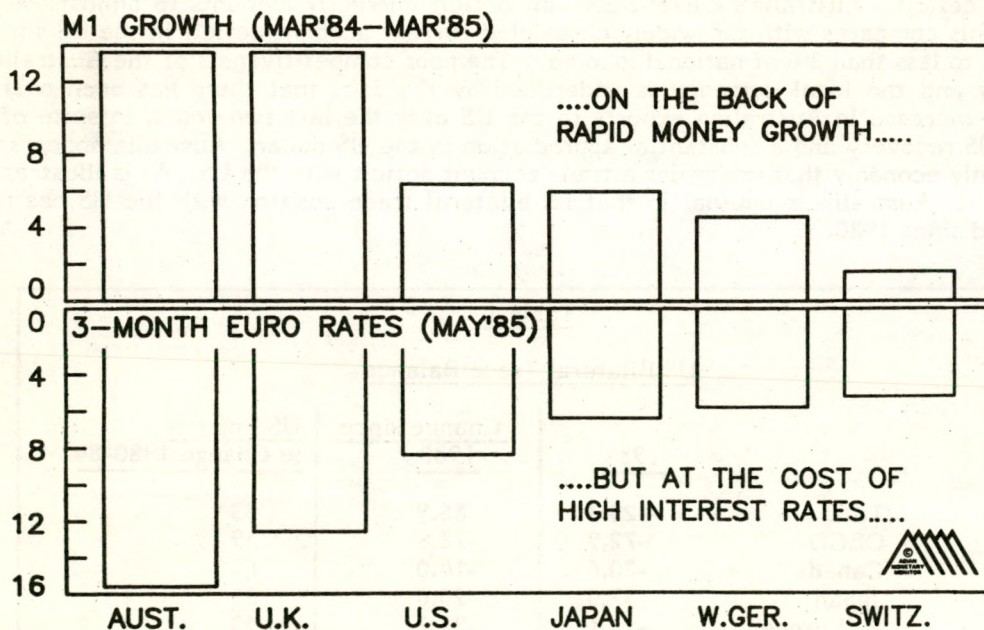
AUSTRALIA: CHART 1

REAL GROWTH IN AUSTRALIA AND OTHER ECONOMIES



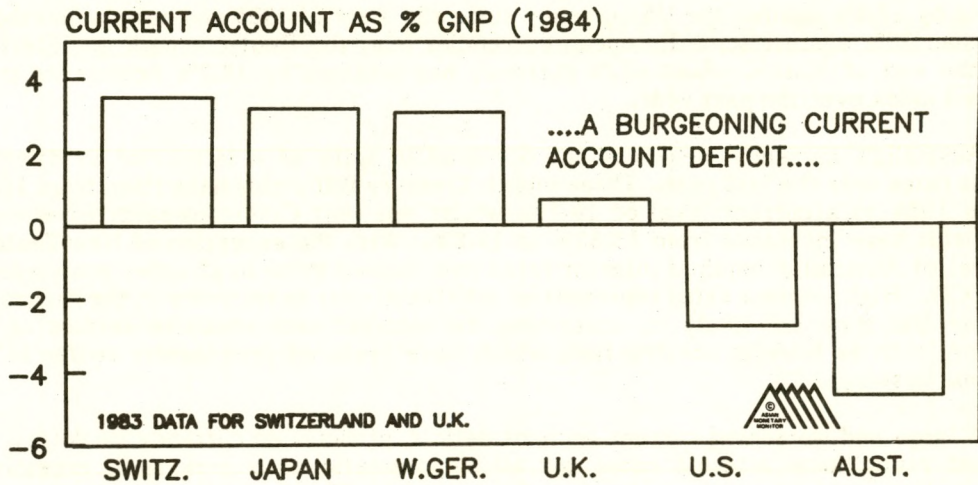
AUSTRALIA: CHART 2

MONEY GROWTH AND INTEREST RATES IN AUSTRALIA AND OTHER ECONOMIES



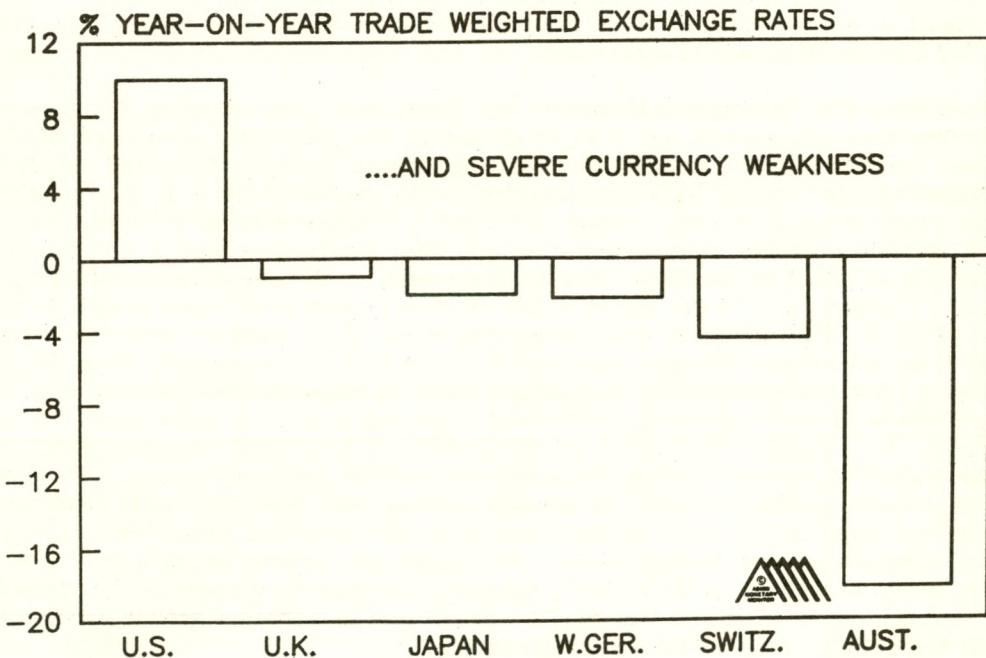
AUSTRALIA: CHART 3

AUSTRALIA'S COMPARATIVE PERFORMANCE ON CURRENT ACCOUNT



AUSTRALIA: CHART 4

THE COMPARATIVE PERFORMANCE OF THE AUSTRALIAN DOLLAR



The deterioration in Australia's current account position has been an important cause of the extensive weakness in the Australian dollar. The Australian dollar has declined by 17.8% against the US currency since the start of 1985 and has plummeted by more than 20% against some European currencies (e.g. the Deutschmark and Sterling) since the end of March. Australia's currency has declined by 18.2% against its trade weighted index over the past year.

Australia's currency weakness has occurred in spite of a large rise in domestic interest rates over the last year. Three month Treasury Bill yields have risen from 11.2% in June 1984 to a current level of 14.7%, whilst ten year Commonwealth government bond yields have increased from 13.85% to 14.8%. With the exception of New Zealand, the level of Australian nominal interest rates now exceed those in all other economies in the OECD. High interest rates represent an additional cost to recovery in the Australian economy and they are likely to undermine the interest rate sensitive sectors of the economy, such as housing construction, which have featured prominently so far in the economic upswing.

A large and worsening current account deficit, pronounced currency weakness, and high and rising local interest rates are all symptomatic of a prolonged, excessively accommodative monetary expansion (see Charts 1-4). The Australian authorities have relied far too heavily upon the Prices and Incomes Accord approach to economic management and have neglected more orthodox measures to limit a build-up in potential inflationary pressures. The Prices and Incomes Accord appears to have been comparatively well maintained in Australia over the last two years, but this has not prevented the deterioration in the range of economic indicators outlined above. Instead, these reflect an accommodative monetary policy which is allowing double digit growth in M1 and M3 for the third year in succession.

In January the Australian authorities abandoned their official target for growth in M3. At the time M3 growth was well in excess of the previously announced 8%-10% target but the Australian Treasurer, Mr. Keating, argued that this reflected mainly the deregulation of commercial banks and trading banks' deposit rates. It is argued that since the commercial banks and trading banks are now allowed to bid competitively for deposits, one may expect reintermediation to these institutions and a corresponding "once and for all" increase in M3 growth. In a comment on the abandonment of monetary targets Mr. Keating said: "We're seeing fairly massive growth in M3 even though we have interest rates at 16% for ninety day commercial bills. If we were to meet (the official M3 target) we would have interest rates which would stall the economy". There is great difficulty, a priori, in establishing the likely impact of financial deregulation on growth in the various monetary aggregates. The best observers may do is to examine the issue empirically. As is evident in Chart 5, growth in each of Australia's monetary aggregates has accelerated in recent months, including the growth in broad money. The broad money aggregate includes deposits at a range of non bank financial institutions which may have been expected to suffer in the event of greater and more effective competition from the commercial and savings banks. Strong growth in both broad money and the monetary base, as well as in M1 and M3, suggests that monetary policy in Australia has indeed been accommodative and that the "artificial" rise in monetary growth produced by financial deregulation may have been exaggerated.

It is likely that there will be two broad consequences following from the Australian authorities' decision to sustain a highly accommodative monetary policy in recent years. Both of these will reflect a change in official economic policy, the first reflecting mainly medium term, cyclical considerations and the second reflecting longer term policy alternatives.

AUSTRALIA: CHART 5 MONETARY GROWTH



The policy of monetary accommodation which the Australian authorities commenced after the March 1983 devaluation had its impact first in the Australian capital markets and subsequently in the cyclical recovery of the local economy. If easy monetary conditions are maintained it is then highly probable that a further "cost" to recovery will emerge in Australia, namely, a cyclical rise in inflation. Higher inflation would limit severely the probability that the Australian recovery may be maintained. It would, therefore, ensure that the economy will remain highly cyclical.

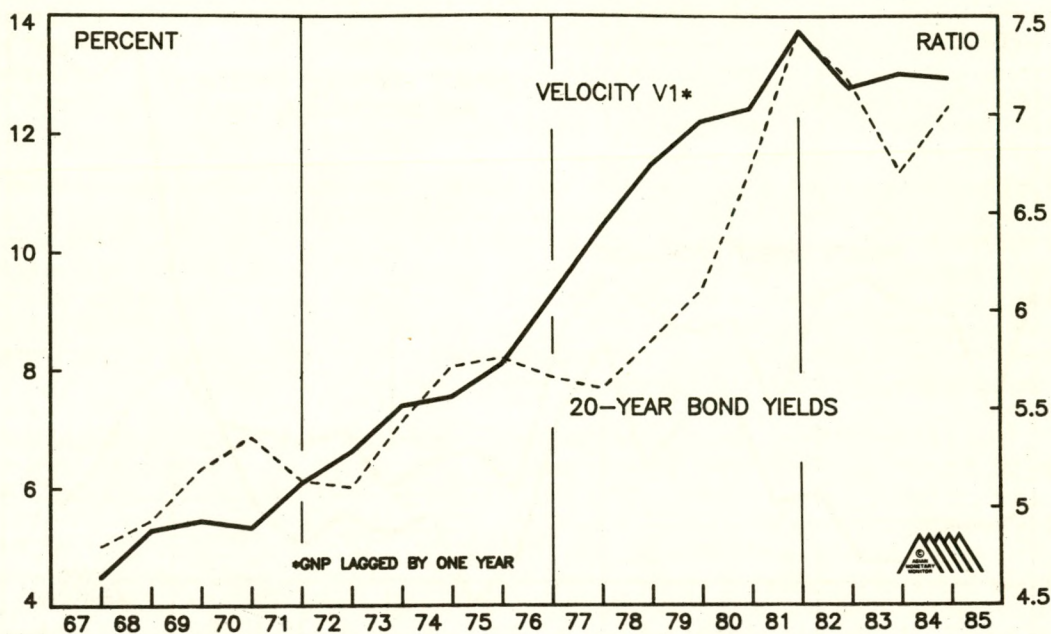
Whether the Australian economy will actually undergo a further recession will depend greatly on the extent of any future rise in inflation. However, it is evident that the authorities cannot prudently reduce local interest until monetary growth slows without exacerbating the likelihood of a rise in domestic inflation or further weakness in the local currency. Therefore the Australian authorities will have to decide how long to maintain domestic interest rates at a high level and how far eventually to reduce monetary growth in this cycle. Slower monetary growth now would entail a reduction in the level of economic activity but may yet stave off a rise in inflation.

One perspective on the current Australian economic environment is that a third year of double digit monetary growth may, in spite of the present reduced level of inflation, prevent Australia from joining the world-wide trend towards "disinflation". An indication that this may be the case is to be found in a comparison of the income velocity of the narrow money aggregates in Australia and the US. In the US (see Chart 6), M1 velocity has slowed markedly over the last five years. This is a fundamental indication that the demand for money to hold (as an asset) rather than to spend has risen and has been reflected in a convincing decline in long bond yields. In Australia, by contrast, where monetary policy has been much more accommodative, neither the trend in velocity nor the trend in long bond yields suggests that sustained lower rates of inflation have been established.

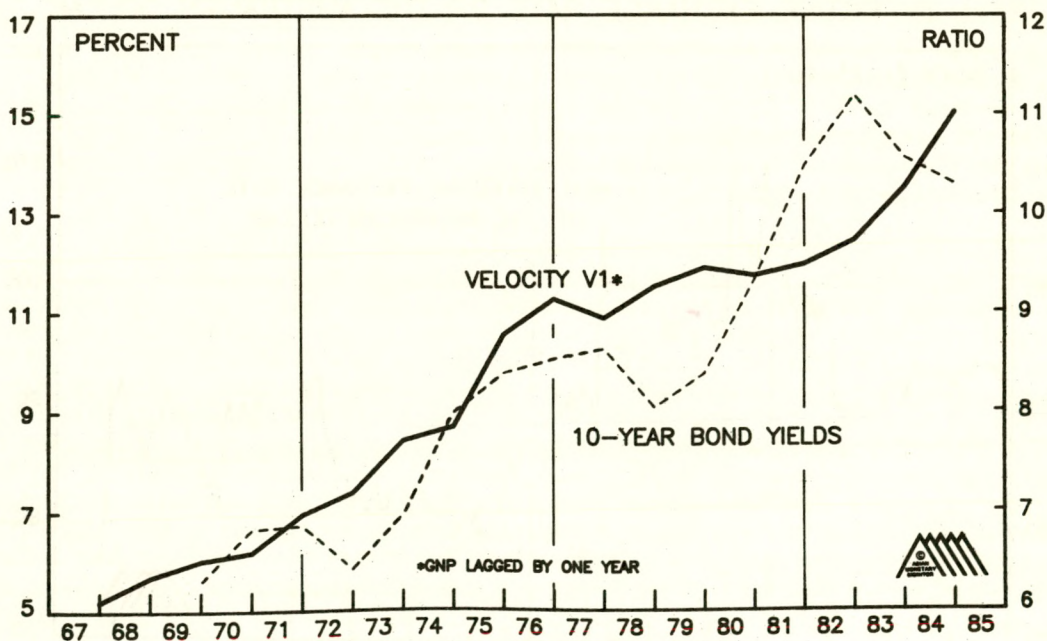
If the medium term question facing the Australian authorities is when, and by how much to reduce monetary growth, the longer term concern relates to the relationship between Australia's current account deficit and the level of the exchange rate. There is nothing imprudent or problematic about running large current account deficits provided the transfer of foreign savings which they represent can be invested efficiently so as to service the debt. Over the last ten years, Australia's cumulative current account deficit has amounted to some A\$45 billion or approximately 25% of nominal GNP. Investors should not exaggerate the problems - even at current interest rates - of servicing this debt, and it is apparent from Chart 8 that an important (if declining) proportion of it has been financed by private direct investment.

However, if Australia maintains current account deficits in the order of A\$10 billion then the costs of servicing this external indebtedness could rise sharply. There are no publicly available official estimates of the future costs of servicing Australia's overseas debt but if Australia sustains current account deficits of A\$10 billion per annum then its cumulative current account deficit may amount to 50% of GNP by the end of the decade. Even if half of this proves to have been "financed" by sales of physical assets, the cost of servicing the remaining net indebtedness could well amount to 2% to 3% of GNP. Whilst for a time Australia undoubtedly could cover these debt service costs by additional borrowing, in the longer term they must be financed by earning current account surpluses. For Australia to generate a current account surplus in the present global economic environment would necessitate either substantially reduced growth in domestic aggregate demand or a further decline (see Chart 9) in the Australian dollar's real effective exchange rate. This admittedly simplified perspective helps to illustrate the longer term alternatives open to the Australian authorities. To guard against sustained large current account deficits the authorities must be prepared either to deflate the Australian economy at the current level of the exchange rate or allow the Australian dollar to depreciate, perhaps substantially, further.

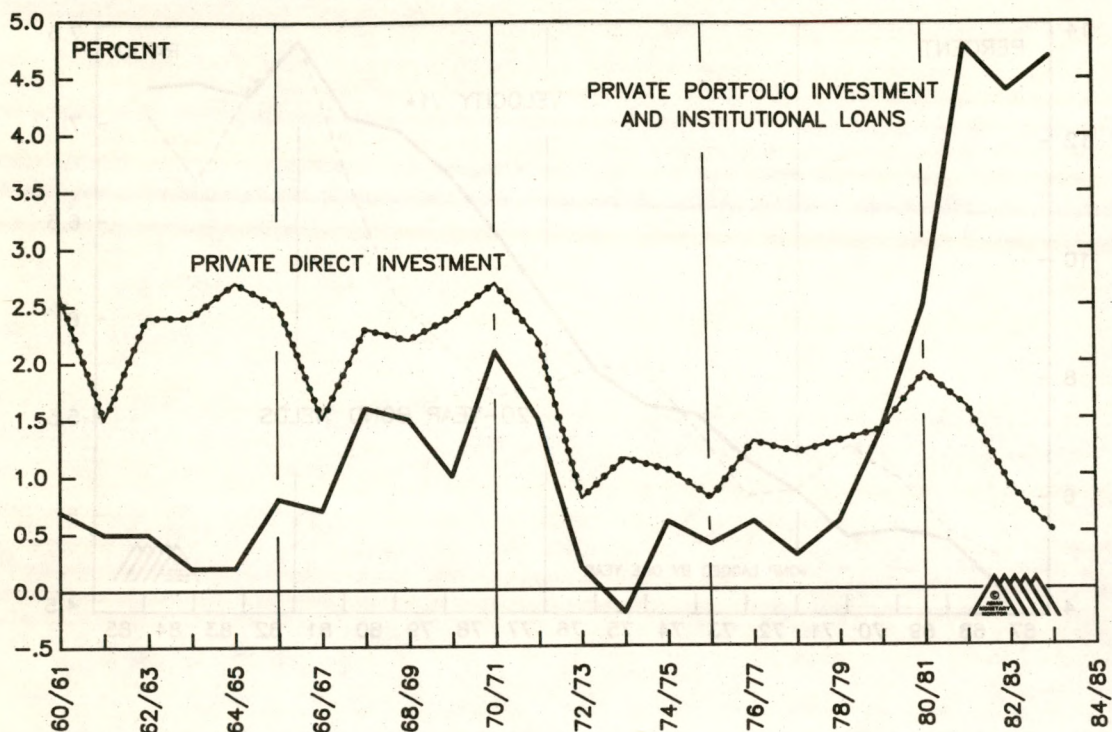
AUSTRALIA: CHART 6
US VELOCITY AND INTEREST RATES



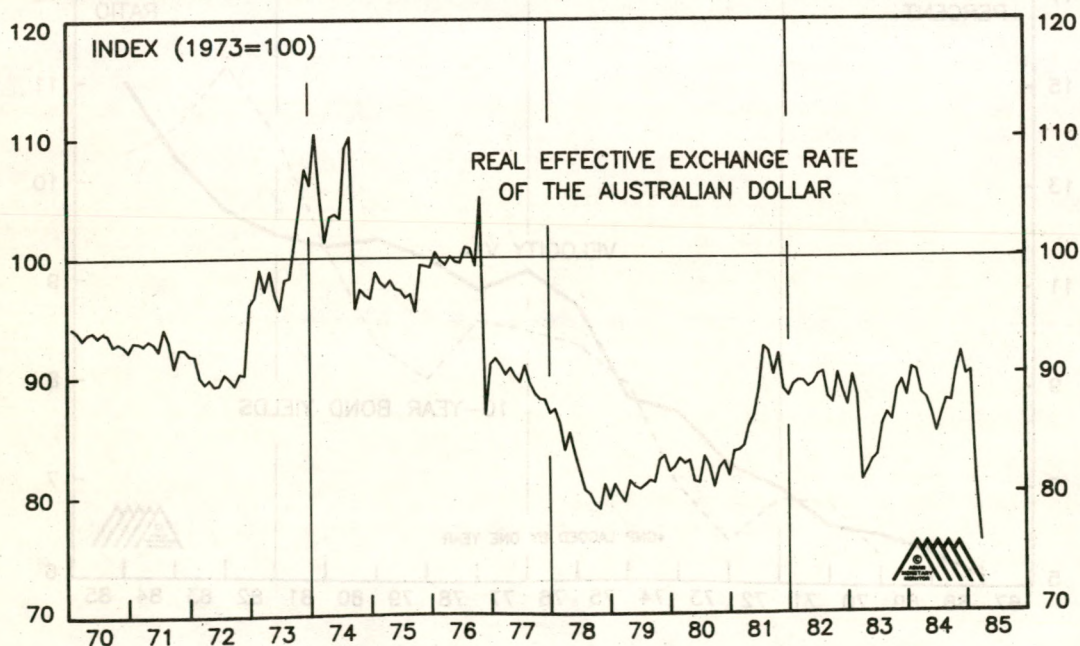
AUSTRALIA: CHART 7
AUSTRALIAN VELOCITY AND INTEREST RATES



AUSTRALIA: CHART 8
FINANCING THE CURRENT ACCOUNT DEFICIT



AUSTRALIA: CHART 9
REAL EFFECTIVE EXCHANGE RATE OF THE AUSTRALIAN DOLLAR



FORECAST: The costs associated with economic recovery in Australia are beginning to constrain real growth there. Monetary growth has been overly accommodative for too long. This is displayed in the high level of interest rates in Australia, the weakness of the Australian dollar and the very large current account deficit. Unless monetary growth is restricted, inflation is likely to start rising and the most important question over the medium term is when the authorities will act to tighten policy: will they act shortly in order to forestall the threat of higher inflation, or will they delay until evidence of rising prices is more evident?

At present, it appears that the Australian authorities are wedded to an Incomes Policy approach to limiting inflation. Whilst Trades Union support for this persists it is unlikely that the authorities will act to tighten policy significantly for to do so would endanger employment growth. Thus it is likely that the Australian authorities will delay slowing monetary growth substantially until inflation shows signs of increasing. This suggests that the Australian economy may continue to grow comparatively firmly this year but also that the cyclical peak in short interest rates remains ahead.

Turning to the longer term issue of how Australia will combat its current account deficit, if we assume that the Australian authorities must eventually reduce monetary growth then the question arises whether they will pursue a restrictive policy for long enough to bring about a substantial improvement in the current account? Over the longer term, at the current level of the exchange rate, a sustained improvement in the current account is feasible only if Australian inflation is brought below that of competing economies or if there is a large rise in Australia's terms of trade. In the absence of the latter, Australia must therefore bring its inflation rate down to perhaps as low as 1% or 2% in order to establish a trend towards sustained current account surpluses. In the present environment, the likely medium term costs in terms of employment and output suggest that this will not prove to be an attractive option. Therefore, so long as Australia continues with a very large current account deficit, an accommodative monetary policy and comparatively high inflation, the long term outlook for the Australian dollar will remain poor.

MALAYSIA

PRESSURE ON LIQUIDITY TO CONTINUE

In 1984 Malaysia posted a large trade surplus of M\$5.69 billion, sharply up from the surplus of M\$1.98 billion recorded in 1983. The surplus was Malaysia's second largest ever, being, in terms of its size, reminiscent of 1979's record surplus of M\$7.06 billion. However, as far as the economy goes the similarity between 1984 and 1979 ends with the trade account. Whereas in 1979 the huge trade surplus led, under Malaysia's managed exchange rate regime, to a surge in money growth, in 1984 liquidity remained under pressure as the rate of money growth dropped below the flat trend which had previously existed since 1981 (see Chart 1) and interest rates climbed throughout most of the year. In October interest rates soared when a bout of speculative pressure against the Ringgit on the foreign exchanges forced Bank Negara Malaysia (BNM) to run down foreign reserves in defence of the Malaysian currency.

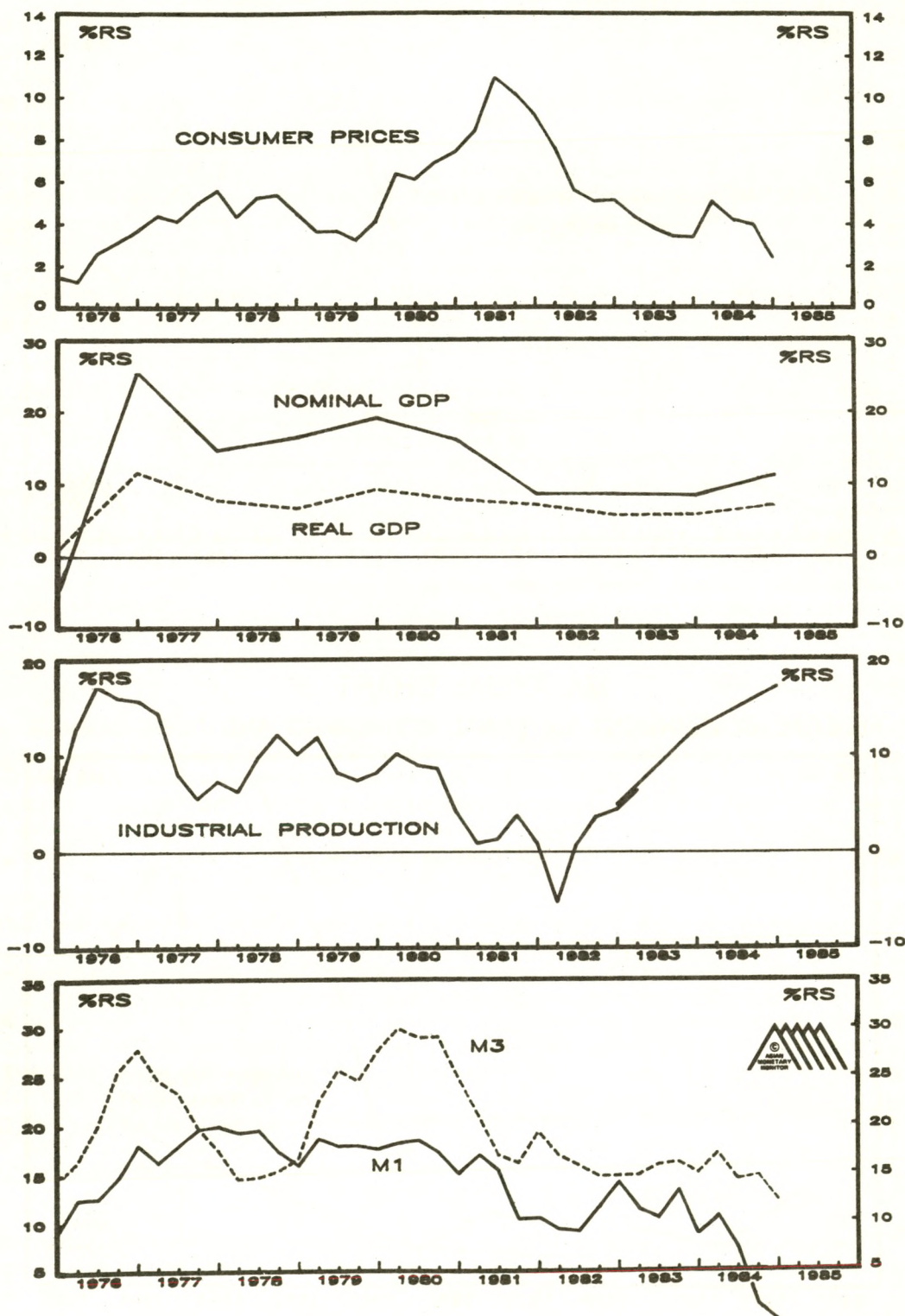
The major difference between circumstances existing now and those obtaining in previous years is the trend to 'austerity' in government fiscal policy, discussed in detail in a previous AMM (AMM Vol. 8 No. 5). Essentially, between 1980 and 1982 the government ran huge budget deficits financed to a large degree by foreign borrowings, which - as capital inflows on the balance of payments - had the effect of supporting the balance of payments position. Since mid-1982, however, the government, worried by Malaysia's rising debt service ratio, has been pursuing a policy of progressively reducing development expenditure in order to reduce the budget deficit and bring foreign borrowing under control. Lower foreign borrowings (meaning lower capital inflows) while debt service payments have continued to rise in line with total foreign debt (meaning higher invisible outflows) have acted to offset much of the benefit to the overall balance of payments derived from the improved trade performance, and thus put a dampener on money supply growth.

Charts 2 and 3 include revised figures for the budget deficit and government net foreign borrowing for 1984. Chart 3, in particular, shows that government net foreign borrowing in 1984 came in significantly below initial expectations, narrowing the gap between borrowings and interest payments markedly. From the chart it can be gathered that the positive difference between net new borrowings and interest payments on existing debt narrowed from M\$3.8 billion in 1982 to M\$1.4 billion in 1984, a drop equivalent to roughly 40% of the improvement in the trade account over the period.

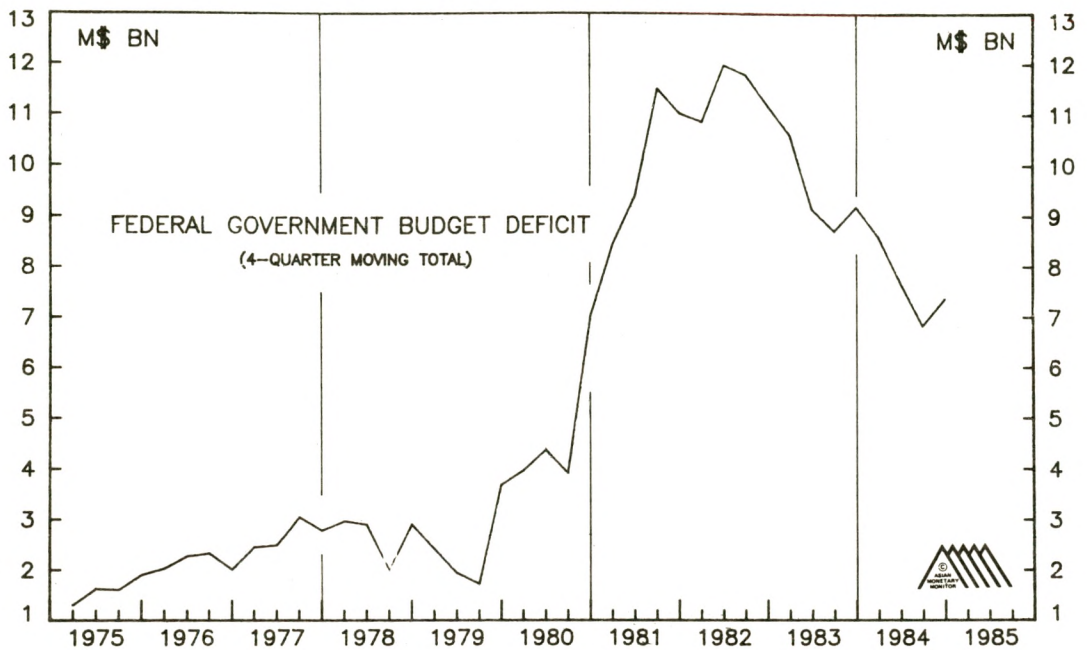
Nevertheless, in 1984 Federal government net new foreign borrowings were still greater than debt interest payments, meaning that these figures cannot on their own explain the difference in liquidity trends compared with 1979, when foreign borrowings and debt service payments were both very low and the difference between them negligible. The major part of the explanation lies with the fact that the continuing deterioration on the services account of the balance of payments has not been solely due to growing Federal Government debt interest payments but also the result of growing deficits on investment income other than interest, net freight and insurance payments, net payments abroad for travel and education and payments for other services. Between 1979 and 1984 the deficit on these items grew by M\$4.05 billion, largely explaining the deterioration in the balance of payments over the period, and hence the low rate of money supply growth in 1984 when compared with 1979.

However, when it comes to explaining liquidity conditions in Malaysia throughout last year there is a further important factor, again relating to the Federal Government budget, to consider - namely the seasonal pattern in government revenues and expenditures.

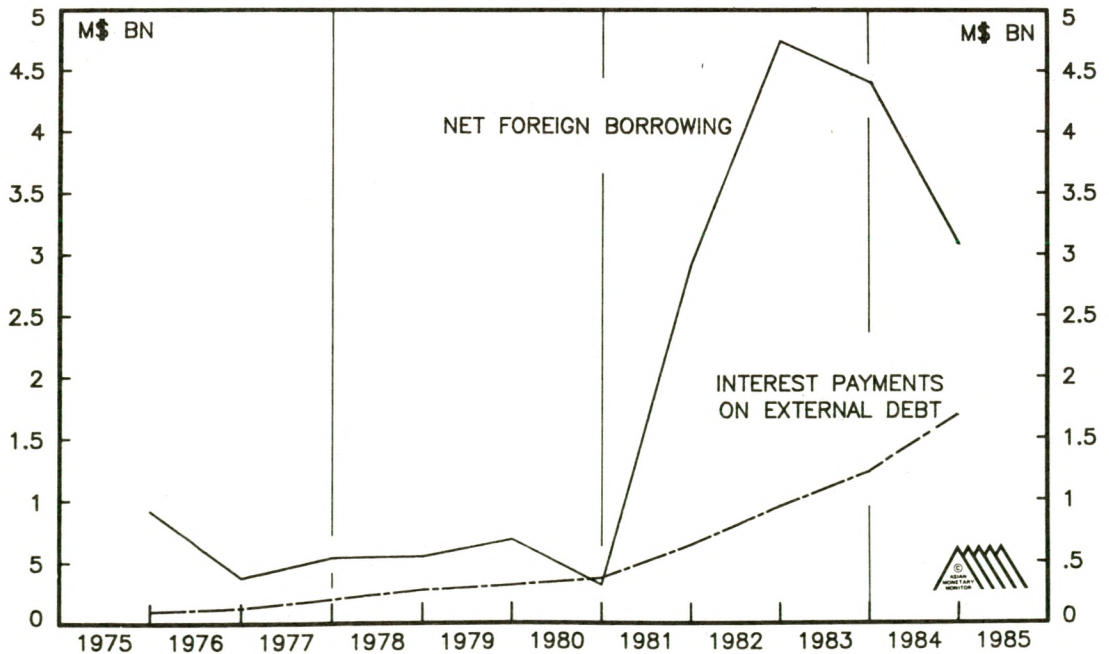
MALAYSIA: CHART 1 MONEY, OUTPUT AND PRICES



MALAYSIA: CHART 2 THE BUDGET DEFICIT



MALAYSIA: CHART 3 FEDERAL GOVERNMENT EXTERNAL BORROWING AND DEBT SERVICE



There has always been a seasonal pattern to government revenues in Malaysia, with revenues tending to be higher in the second half of the year, particularly in the third quarter, reflecting the timing of personal income tax payments and payments to the government by the national oil company, Petronas. However, much more importantly, over the period of large budget deficits there has been a large and growing seasonal bias in government expenditure, both current and development. Government departments, which in the past have been given allocations of funds on an annual basis, have tended to incur all their expenditures at year end in order to make up their allocations. Last year, with the psychology towards spending within government becoming increasingly cautious in the wake of budget cutbacks, this effect was particularly marked, with departments refraining from spending throughout most of the year but then pushing to meet allocations at year-end.

The result of this was that practically all of last year's budget deficit of M\$7.358 billion was incurred in the final quarter of the year with the deficit for the first three quarters totalling only M\$624 million (little different to the position in the first three quarters of the pre-large-deficit years). The government actually ran a small surplus in the third quarter of the year and, in a monetary sense, exerted a large contractionary influence on liquidity over the first three quarters as a whole when bond sales to the Employees Provident Fund (EPF) and commercial banks are taken into account. The extreme seasonal bias in the government's deficit last year was also allowed to be reflected in the pattern of foreign borrowing, with roughly half of the government's net foreign borrowing occurring in the final quarter. Together, these factors go a long way to explaining the increasing pressure on liquidity in the economy over the first three quarters of the year, the acute pressure on both interest rates and the Ringgit exchange rate in the 'autumn', and the manner in which these pressures so markedly eased towards the end of the year.

The problem of the effects of seasonality in government revenue and expenditure is relatively easily addressed and now has been. On the revenue side, Petronas is now distributing its payments to the government more evenly over the year and, on the expenditure side, spending allocations are now being given on a quarterly, rather than annual, basis. Much more difficult for the government to address is the problem of whether, and how quickly, to continue to reduce foreign borrowings, particularly if commodity prices fail to show any improvement.

Superficially, the government's current policies might appear to be compatible. In reality, however, the policies of reducing the budget deficit and accompanying foreign borrowings, partially deregulating the monetary system and economy, and encouraging private investment are somewhat in conflict with each other. While the latter policy (the most notable manifestations of which are the adoption of IMF proposals on deregulation of the financial system and World Bank proposals on industrial tariff and tax reform, as well as the liberalisation of equity ownership targets under the New Economic Policy and moves to privatise certain government owned industries) requires relatively easy liquidity conditions and a strong economy for its success, the former policy threatens to undermine these requirements. Thus, in effect, for the government the constraint on reducing foreign borrowings further is now no longer the need to finance the budget deficit but the need to keep liquidity in the economy from becoming too tight.

The government could finance much more of its deficit domestically than it is currently doing by raising EPF contributions (which it would like to do) and, probably, selling more debt to other institutions. In fact, although the government is likely to postpone any move to raise EPF contributions for the time being for fear of slowing the economy, there is a further factor pointing to the likelihood of an increased domestic bond issue in the future, and that is the move to financial liberalisation. If the domestic bond market is to be liberalised in the sense that there will be an active secondary market in government debt carrying 'market' yields, then the market needs to be freed from its current 'captive' status in which the only participants are forced buyers - the

EPF and commercial banks. Freeing the market will almost certainly entail the government issuing a larger amount of domestic debt - larger than the statutory requirements of the EPF and financial institutions - unless there are major regulatory changes.

Thus, in fact there is no real financing constraint preventing the government from reducing foreign borrowings further. The government could already increase domestic borrowings and in future may be under some independent pressure to do so. The constraint on reducing foreign borrowings is now no longer the budget deficit but domestic liquidity conditions and the exchange rate. One apparent way out of this quandary, at least for the short-term, is for the authorities to continue to reduce foreign borrowings thereby tightening the external sources of monetary growth, while easing up on the domestic sources of monetary growth. This is effectively exactly what BNM has recently done, via a reduction in commercial bank reserve requirements.

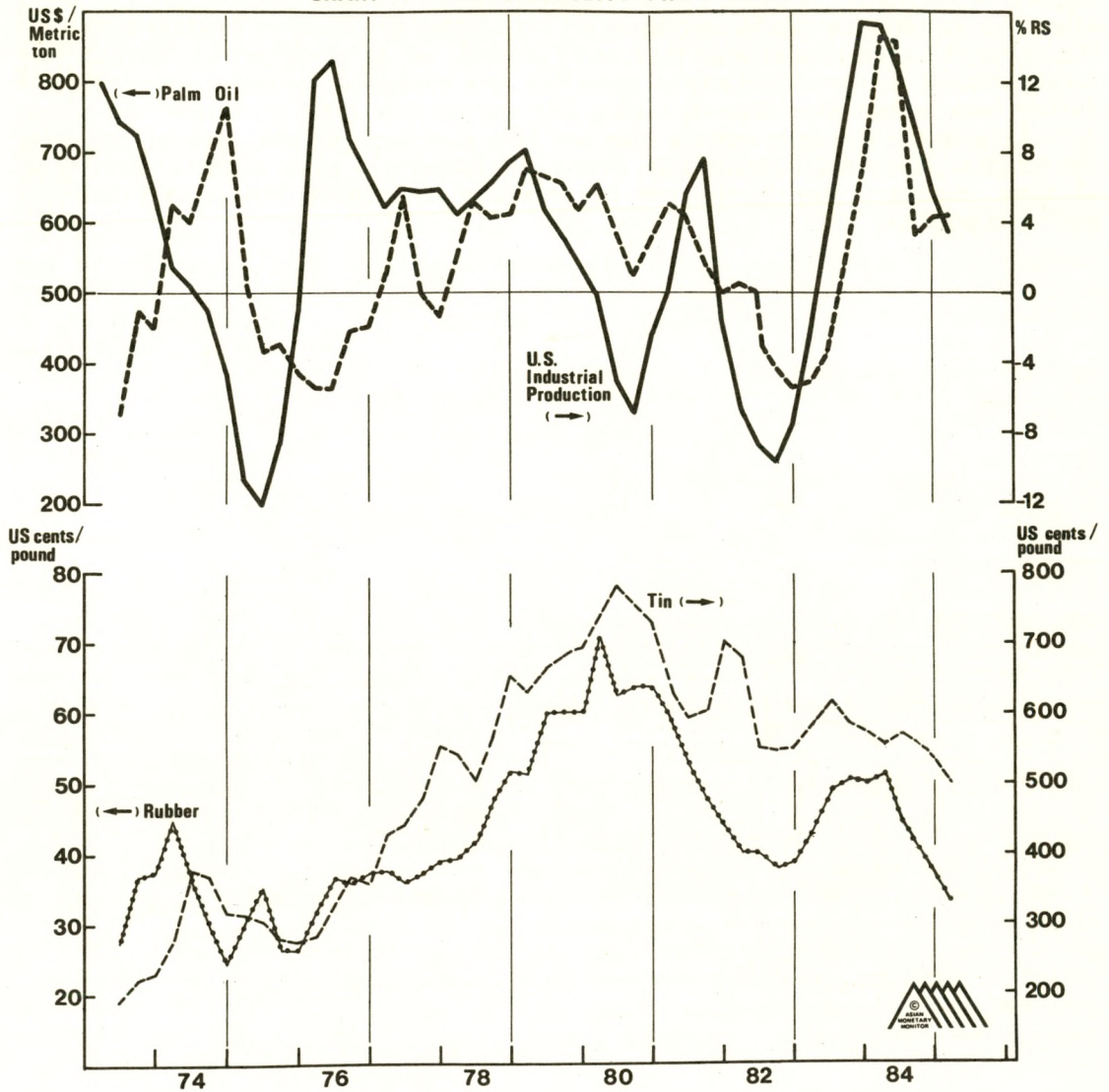
On April 15th BNM reduced the statutory reserve ratio for commercial banks, lowering their required holding of statutory reserves from 5% of total eligible liabilities to 4%. (Eligible liabilities do not only comprise bank deposits, but also include net amounts due to other commercial banks, finance companies and merchant banks, negotiable certificates of deposit, and instruments discounted/rediscouted under repurchase agreements.) The move was widely quoted as injecting approximately M\$440 million into the monetary system. The M\$440 million in fact is simply 1% of total eligible liabilities, which stood at M\$44.4 billion as at the end of February, and as such represents simply the amount of statutory reserves 'freed' by the reserve requirement reduction. The increase in the money supply which ultimately results from the reserve requirement reduction will be much greater, in accordance with the money multiplier effects.

Within the Malaysian financial system a reduction in reserve requirements clearly represents the easiest way for the authorities to ease liquidity conditions from the domestic side. As a result of the reduction, interest rates have already fallen further from their October peaks, and may ease somewhat more over coming months. However, a reduction in reserve requirements is only a 'one-off' easing move even though its effects - on money growth - may be felt for some long time. In the longer term it may not be possible for the authorities to continue relaxing the domestic sources of monetary growth in an effort to maintain easy liquidity conditions if the external sources were to continue to move adversely. Under such circumstances, foreign reserves would keep falling and eventually the downward pressure on the exchange rate would become unbearable.

Ultimately everything returns to the fact that in the long-term the only solution to Malaysia's problems is a fundamental and sustainable improvement in the overall balance of payments position. The government is well aware of this and has taken various steps to address, in particular, the problem of the now huge, and persistently growing, deficit on invisible transactions. However, it is doubtful that significant progress on reducing the invisibles deficit will be made over the next two to three years. The same also applies to the development of Malaysia's gas reserves and the switch from use of petroleum to gas in power generation, which will not likely yield major benefits to the trade account until the end of this decade.

FORECAST: Thus, despite Malaysia's lessening dependence on commodities, somewhat ironically over the next two to three years Malaysia's economic fortunes and the prospects for liquidity conditions are likely to hinge more than ever on commodity prices, as Malaysia continues to reduce its dependence on external borrowings. Barring a sharp rise in commodity prices (palm oil, rubber, timber, tin), which seems unlikely, the trend towards tighter liquidity is likely to reassert itself either later this year or next year. A sharp fall in oil prices would accelerate this process as it would likely lead the authorities to abandon any hope of maintaining a strong economy and accommodative

MALAYSIA
CHART 4: THE COMMODITY PRICE CYCLE

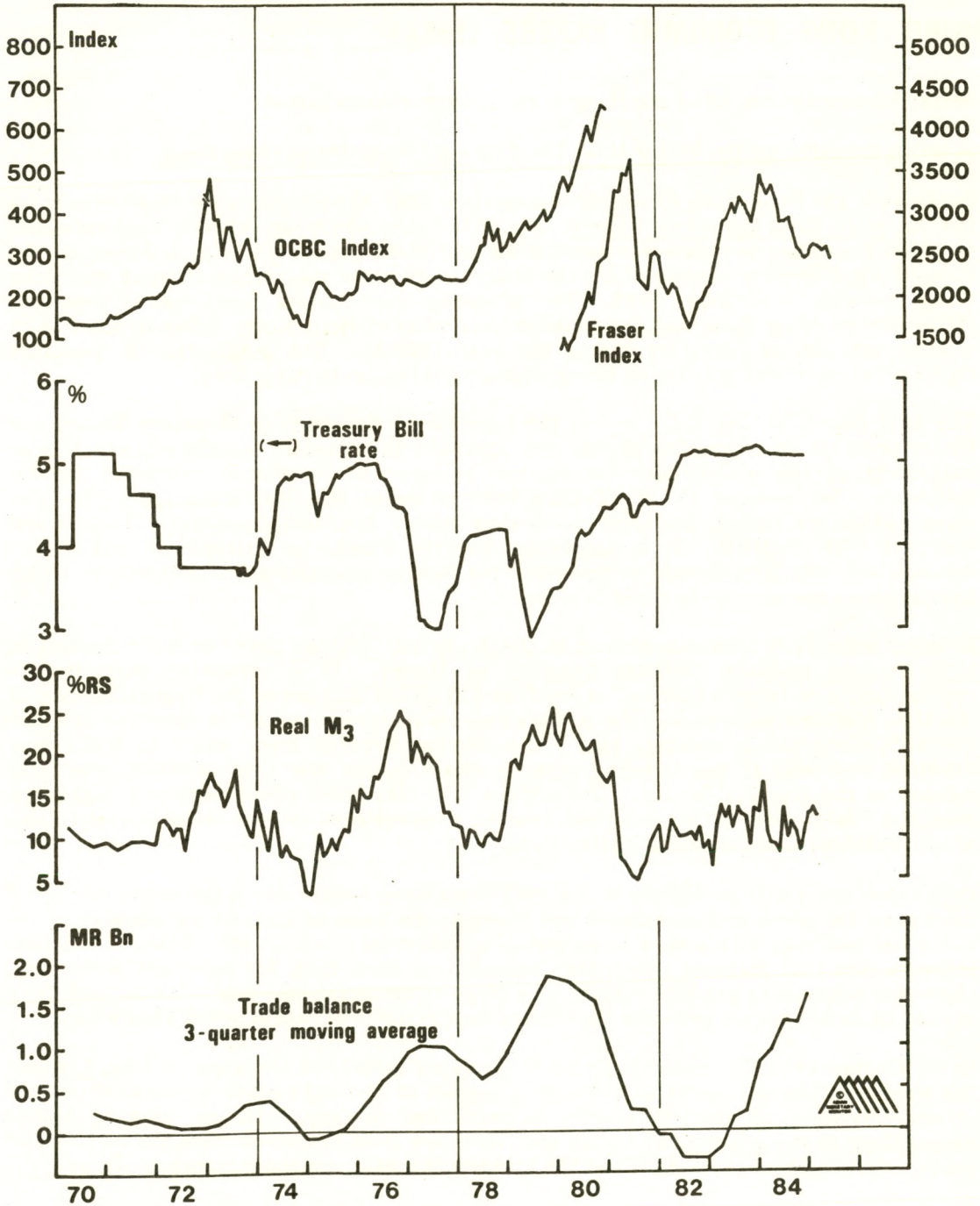


liquidity conditions. Although, theoretically, the authorities could offset the worst effects of an oil price fall by increasing oil output they are likely to hesitate to sell off the country's oil reserves at what they would probably see as 'cheap' prices. Instead, they would probably accommodate any oil price fall by a mixture of measures such as further cutting back budget expenditures, raising EPF contribution rates (to finance the budget deficit, raise the domestic savings rate and help slow imports) and, perhaps, devaluing the Ringgit. However, unfortunately, even in the absence of an oil price fall some or all of these measures may in the end be necessary to improve Malaysia's balance of payments position.



Malaysia : Chart 5

Liquidity Indicators, the Trade Account and the Stock Market



BOOK REVIEW

HONG KONG ECONOMIC PAPERS (1984)

Serial Publication No. 15 of the Hong Kong Economic Association

Synopsis prepared by Dr. Victor Mok, The Chinese University of Hong Kong

Every year the Hong Kong Economic Association (HKEA) publishes a set of articles in its journal, Hong Kong Economic Papers. The 1984 issue, which has recently been released, contains 8 articles by academic economists and three papers given at a Forum on the Hong Kong Currency organised by the HKEA soon after the stabilisation of the Hong Kong currency in October 1983. The academic contributors come mainly from the University of Hong Kong and the Chinese University of Hong Kong, although some were visiting scholars or lecturers during the year 1983-84. The publication is therefore representative of the activity of the economics profession in Hong Kong.

The first paper, by Dr. Y.C. Jao on the Libertarian Approach to Monetary Theory and Policy presents an exposition of this new approach to monetary economics, which is an outgrowth of the mainstream monetarism represented by Milton Friedman and his followers. Jao reviews the theoretical foundations of the libertarian approach under three categories, namely the legal restrictions theory, the Modigliani-Miller theorem and the real bills doctrine. It is suggested that the libertarian critique of mainstream monetarism will increasingly overshadow the Keynesian-monetarist controversy which has become somewhat sterile and irrelevant.

In some way, Jao's theme is echoed in the Scott and Johnson paper on Rent-Seeking in U.S. Banking and the Optimal Quantity of Money. It is estimated that, due to regulations, a de facto subsidy of as much as \$30 billion accrues to the financial sector of the U.S. economy each year. The authors express their concern at the direction in which the U.S. Congress is moving, i.e., while moving towards freer entry to the money creation business, it has lowered reserve requirements and thus provided a greater subsidy to the financial sector. The authors also take issue with Friedman's suggestion that the Fed's newly added marginal reserve requirements on non-member institutions are, in essence, taxes on those institutions.

Ho's paper deals with provisions in the 1982 Hong Kong budget which increased the initial allowance for plant and equipment and changed the basis of calculating allowances for industrial buildings with a view to encouraging industrial development. Based on assumed inflation and real discount rates, Ho's calculations show that, for plant and machinery, increased allowances produce results very close to instantaneous depreciation, and there is very little difference between the old and new systems of depreciation allowances.

In his Comparative Econometric Study of Tourist Expenditure Behavior in Asia, Lin uses the Krelle-Pallaschke model to estimate a system of demand equations and so obtain the utility functions of tourists visiting a particular country. Survey data of tourist expenditure in Hong Kong, Sri Lanka and Nepal are used to demonstrate the behavior of utility maximization by tourists and the familiar law of diminishing marginal utility.

Two papers by Donnithorne and Wang provide first-hand information on recent developments in China. In her paper, Donnithorne relates in detail the preparations, conduct and evaluation of the Chinese Census of 1982. While suggesting that the quality of this Census must rank higher than those of previous ones, she points out that a significant number of respondents may have had weighty motives to misreport since the authorities freely admitted that individual returns would be used to enforce the residential registration system and for other purposes. Wang's paper on Reforms in Foreign Trade and Investment in China summarizes the evolving contradictions into ten

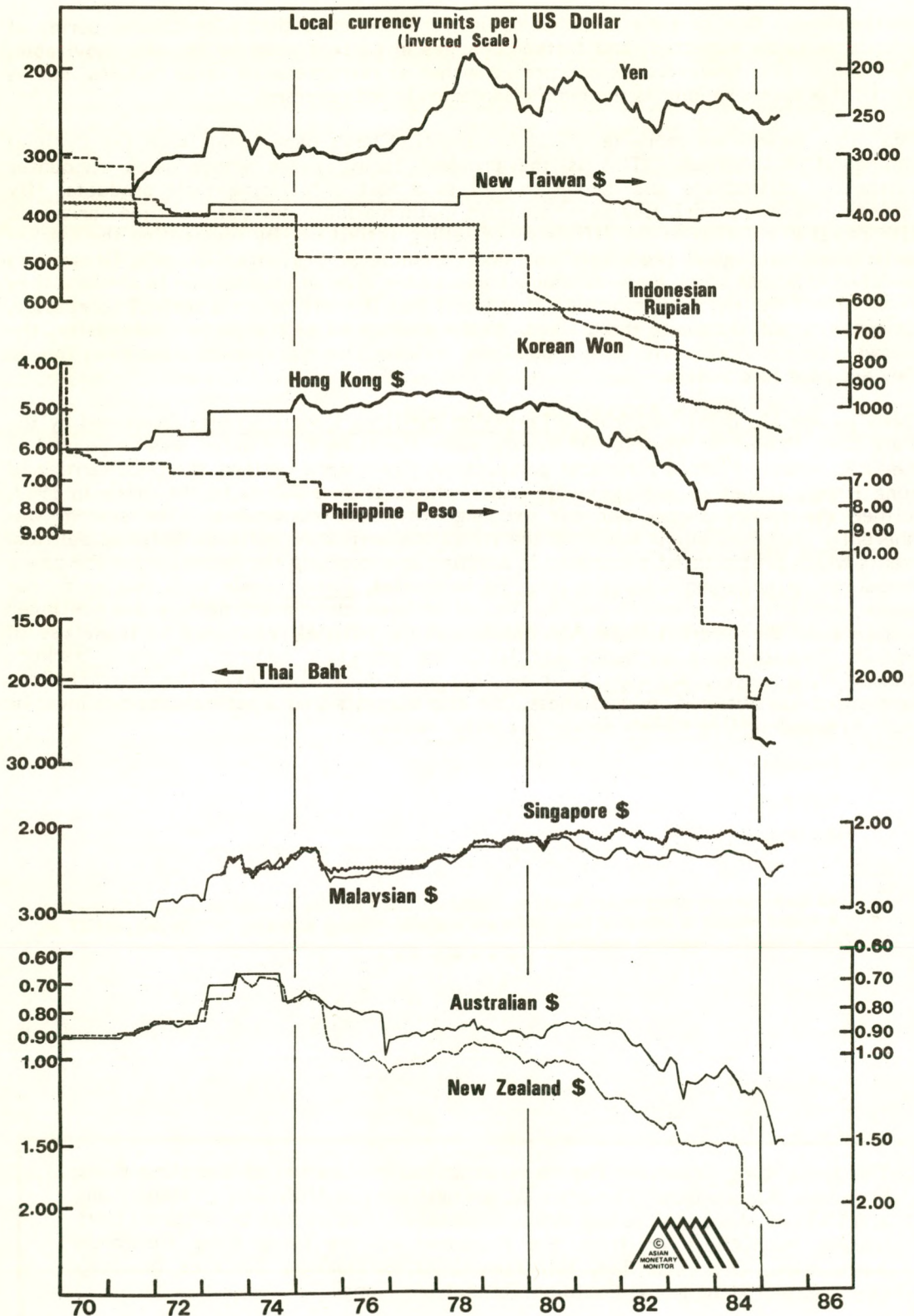
relationships. Due to their complex nature, it is believed that a continuous series of reforms is to be expected, and further changes in current reforms are also inevitable. They should not, however, be interpreted either as retrogressions or as failures, but as practical progress so long as the main orientation is not reversed.

Two other papers are more technical in nature. Chen's paper deals with the Optimal Timing of Withdrawal. This is the problem facing firms whose sales encounter unexpected difficulties and decide to call to a halt to offering their products. By extending Solow's model, this paper analyzes mathematically the optimal time horizon of withdrawal in relation to the efficiency of selling activities. By segmenting the market participants into good predictors and poor predictors, Li's paper extends Grossman's model of efficient stock markets where traders have diverse information to see how they would affect the equilibrium price. It is found that if there exists a perfect forecaster, his behavior will dominate the market. In the absence of such a perfect forecaster, the overwhelming majority will have a dominant influence on the market price even though they are poor forecasters.

Three papers are presented from a Forum on the Hong Kong Currency sponsored by the Hong Kong Economic Association shortly after the Hong Kong dollar was re-pegged to the U.S. dollar. From a historical perspective, Greenwood reviews the peculiarities of Hong Kong's monetary arrangements under which, from 1972 up to the crisis in 1983, neither the money supply nor the exchange rate was controlled. The system was inherently unstable, but it was only the fortuitous arrival of quite exceptional political events which precipitated the crisis. In addition to explaining the rationale for the newly introduced arrangements for the issue of banknotes, Latter deals with two particular issues in which Government's position has often been questioned, namely the continued existence of the Interest Rate Agreement and the official reluctance to make use of liquidity requirements on banks and DTCs for monetary control. From a banker's standpoint, however, Menezes believes that now more than ever the Interest Rate Agreement has outlived its usefulness. He also suggests that a serious attempt must be made to broaden Hong Kong's domestic capital markets.

The Hong Kong Economic Papers is an annual publication of the Hong Kong Economic Association. The price of a single copy is HK\$40.00 in Hong Kong and US\$9.00 abroad (including overseas postage). Copies may be obtained from leading booksellers or from the President of the Hong Kong Economic Association, Dr. Y.C. Jao, Department of Economics, Knowles Building, University of Hong Kong, Pokfulam Road, Hong Kong.

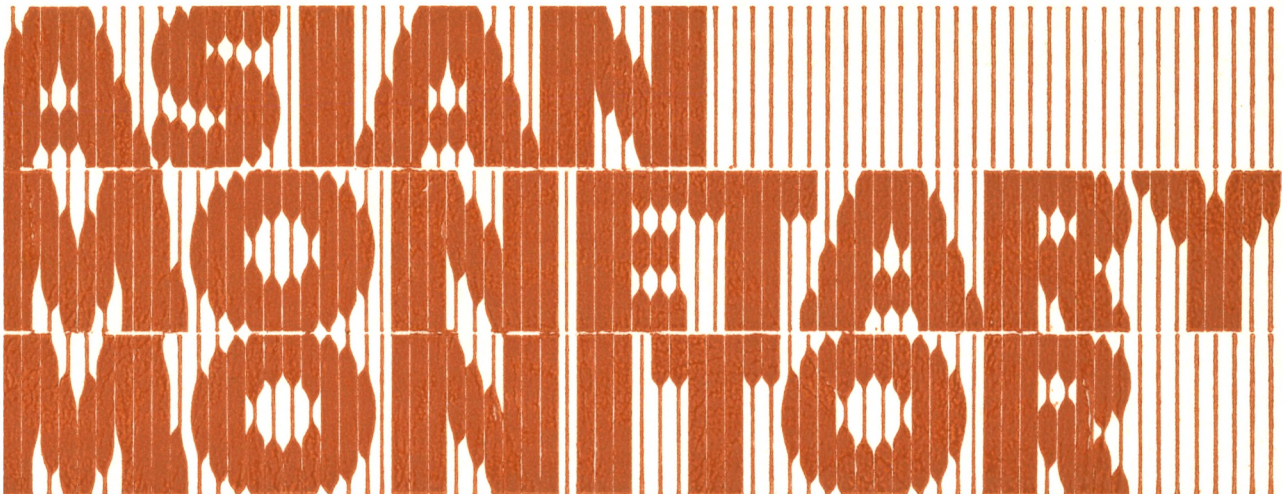
EXCHANGE RATES IN THE FAR EAST





ASIAN MONETARY MONITOR

is published by
Asian Monetary Monitor Ltd.,
P.O. Box 12964, G.P.O.,
Hong Kong.



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Asian Monetary Monitor is a bimonthly publication specialising in the analysis of economies along the Asian Pacific Rim. Sold by subscription only, price US\$200 p.a. inclusive of air mail delivery to any part of the world. Correspondence and subscriptions should be addressed to The Editor, Asian Monetary Monitor Ltd., P. O. Box 12964, G.P.O., Hong Kong.

EDITOR:

John G. Greenwood

M.A. (Hons) Econ. Edinburgh
Research Economist, University of Tokyo
Economist at G.T. Management (Asia) Ltd.

**CONTRIBUTING
EDITORS:**

Hugh P. Sloane

B.A. Econ. Bristol
M. Phil. Econ. Oxford
Economist at G.T. Management (Asia) Ltd.

Tim J. Lee

B.A. Econ. Cambridge
Economist at G.T. Management (Asia) Ltd.

**CHARTS AND
STATISTICS:**

S.Y. Chan

Michael Wong

ADMINISTRATION:

Isabella Ling

Asian Monetary Monitor is published in

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ASIAN MONETARY MONITOR

July - August, 1985

Vol. 9 No. 4

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KEY TO SYMBOLS USED IN THE CHARTS

% RP - Percentage Rate of change over Preceding period.

% RS - Percentage Rate of change over Same period of preceding year.

SA - Seasonally Adjusted.

SAAR - Seasonally Adjusted at Annualised Rate.

HONG KONG

ADJUSTING TO THE LINK

Following the switch in Hong Kong's monetary system from a floating exchange rate to a fixed exchange mechanism in October 1983, major changes have occurred in the behaviour of a whole range of nominal economic indicators. To review those changes this article considers the adjustment of Hong Kong's economy to the new US dollar linked exchange rate in four areas: the adjustment of domestic prices to prices in the USA, the changes in Hong Kong's external balance of payments, developments in Hong Kong's credit and capital markets, and how the monetary multipliers which affect the behaviour of the Hong Kong dollar money supply have moved since October 1983.

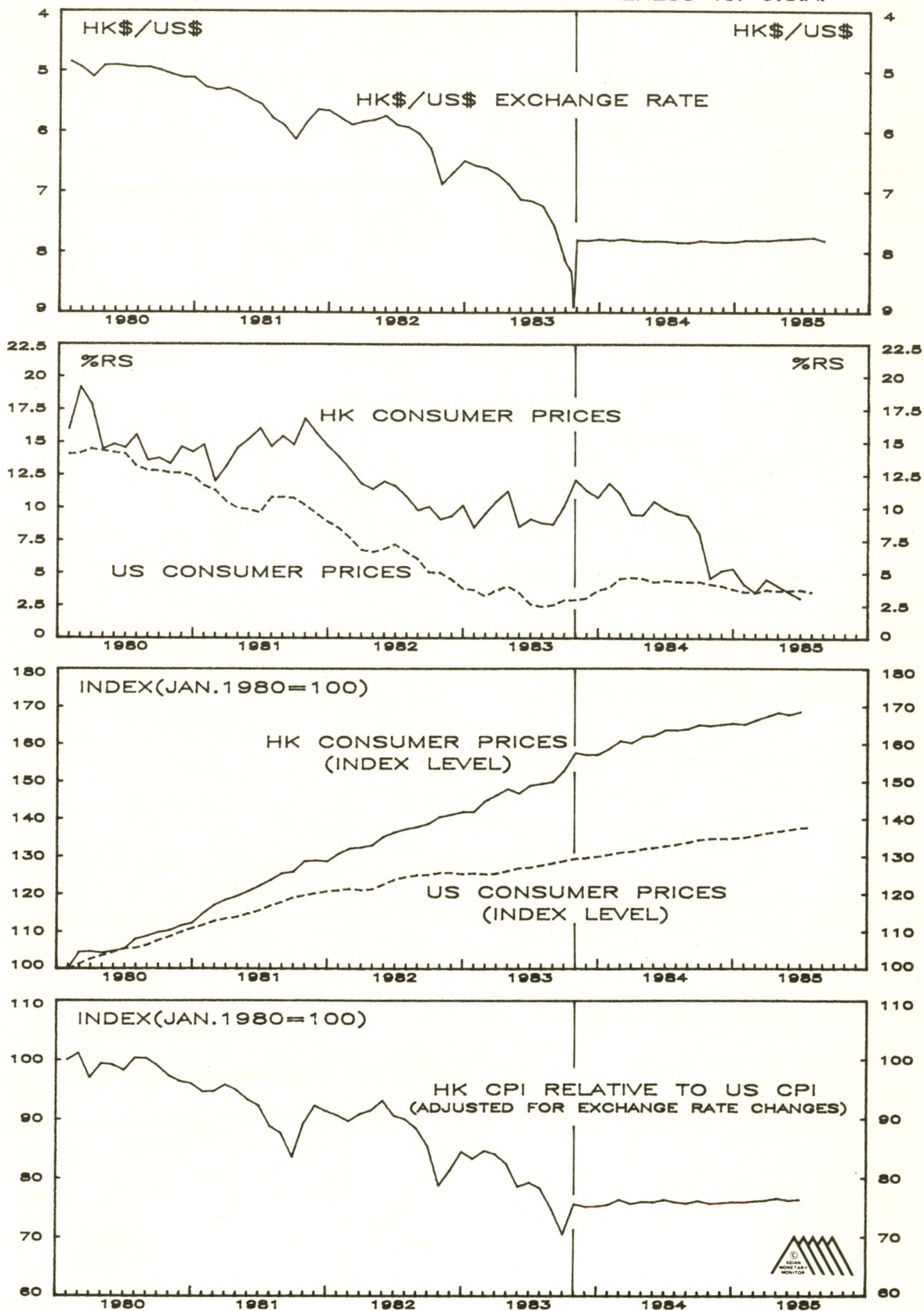
1. Adjustment of the Domestic Price Level to US Prices

The linking of the Hong Kong dollar to the US dollar at an official parity of HK\$7.80 = US\$1.00 for banknotes fixes the value of money in Hong Kong in two complementary ways. First, it sets the external purchasing power of the Hong Kong currency. The free market exchange rate for the US\$ in Hong Kong fluctuates in a narrow range around HK\$7.80, so that the external purchasing power of the Hong Kong currency remains very stable in relation to the US\$. Of course the value of the US\$ may fluctuate against other currencies, and the value of the Hong Kong dollar will alter accordingly. (In just the same way, the value of all silver standard currencies altered in value in relation to gold standard currencies when the world operated with two metallic standards.) Second, and more importantly, the linked rate system ties the domestic purchasing power of the Hong Kong dollar to the domestic purchasing power of the US dollar. Domestic purchasing power means the average purchasing power of a unit of currency spread over all goods and services. A measure of the current price of all goods and services is provided by the price index for the GNP, or the GNP deflator. The purchasing power of the currency is therefore equivalent to the inverse of the overall price level so that as domestic prices rise the general purchasing power of the currency falls, and as domestic prices fall the general purchasing power of the currency rises.

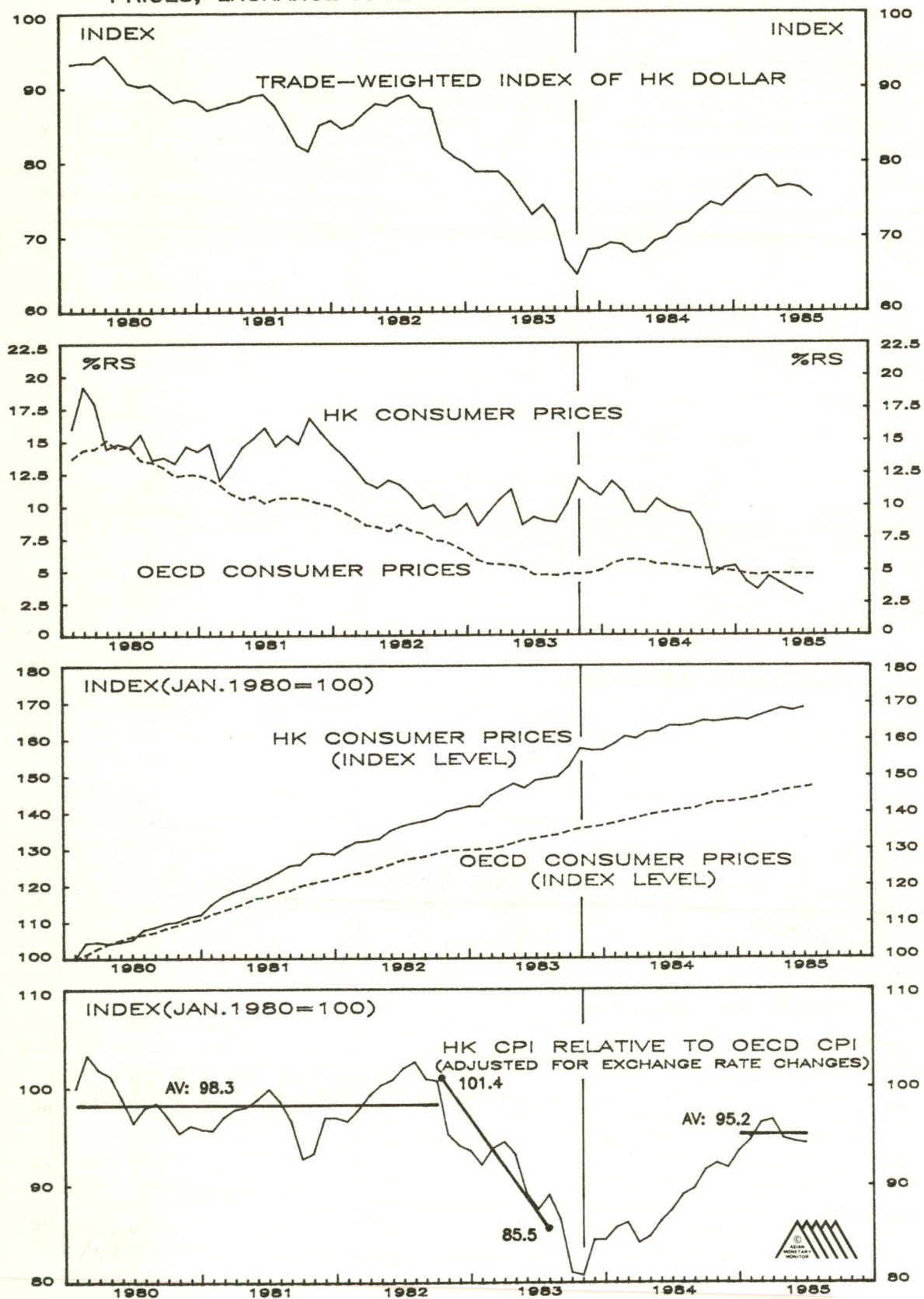
In Hong Kong the gross domestic product (GDP) and its deflator are calculated only annually and one must make do with a consumer price index for measurements over shorter periods. Consumer spending accounts for about 65% of Hong Kong's GDP, so the CPI is the closest proxy for the GNP deflator. From the argument above it follows that, under the linked rate system for the HK\$, the level of consumer prices in Hong Kong should move roughly in line with the level of consumer prices in the USA over time, allowing for differences in the composition of the US and Hong Kong indices. Chart 1 shows what has happened to relative prices in Hong Kong and the USA in the last three and a half years under the floating exchange rate and in the period since the introduction of the linked rate system for the HK\$ in October 1983. As shown in the top panel, the Hong Kong dollar depreciated steadily from around HK\$5 = US\$1.00 to around HK\$6 in mid-1982, whereupon, following Mrs. Thatcher's visit to Peking in September 1982 the Hong Kong dollar plunged, recovered temporarily, and then fell at an accelerating pace until September 1983. Since Hong Kong's imports amount to somewhere around 80-90% of GDP, the translation of import prices into the general consumer price level is very rapid. Thus instead of rising more slowly as US prices did in 1981-82, Hong Kong prices continued to rise at double-digit rates through mid-1982, as illustrated in the second panel of Chart 1, reflecting the continued rapid rise of the index level in the third panel of the same chart. Adjusting Hong Kong's higher rate of price rise for changes in the exchange rate against the US\$, it is nevertheless clear that the depreciation in the exchange rate up to mid-1982 was sufficient to maintain Hong Kong's competitiveness. This is shown by the downward slope of the exchange rate-adjusted relative price line in the bottom panel.

HONG KONG: CHART 1

PRICES, EXCHANGE RATE AND COMPETITIVENESS vs. U.S.A.



HONG KONG: CHART 2
PRICES, EXCHANGE RATE AND COMPETITIVENESS vs. OECD



Once the linked rate was introduced in October 1983, however, a dramatic change occurred in all three measures. The year-on-year rate of change remained around 10% until October 1984, but then as the effect of pre-October 1983 price increases was removed the year-to-year change declined steeply, so that between September 1984 and June 1985 the average year-on-year increase for the three consumer price indices in Hong Kong fell from 8.0% to just 3.1%. It is evident that the level of prices (in the third panel) stabilised very quickly after the pegging or fixing of the Hong Kong dollar. In the bottom panel this is illustrated by the virtually horizontal line for relative prices since October 1983 i.e. consumer prices in Hong Kong and the USA have moved in line together since October 1983.

Chart 2 shows the same set of comparisons but this time for Hong Kong prices relative to the average level of prices or inflation in the OECD. Here again prices in Hong Kong generally rose faster than prices in OECD countries (see the two middle panels), but this was offset by the depreciation of the Hong Kong dollar against a basket of other currencies (top panel), meaning that on average the competitiveness of Hong Kong was not much affected until mid-1982 (bottom panel) when the currency began to slide much more rapidly.

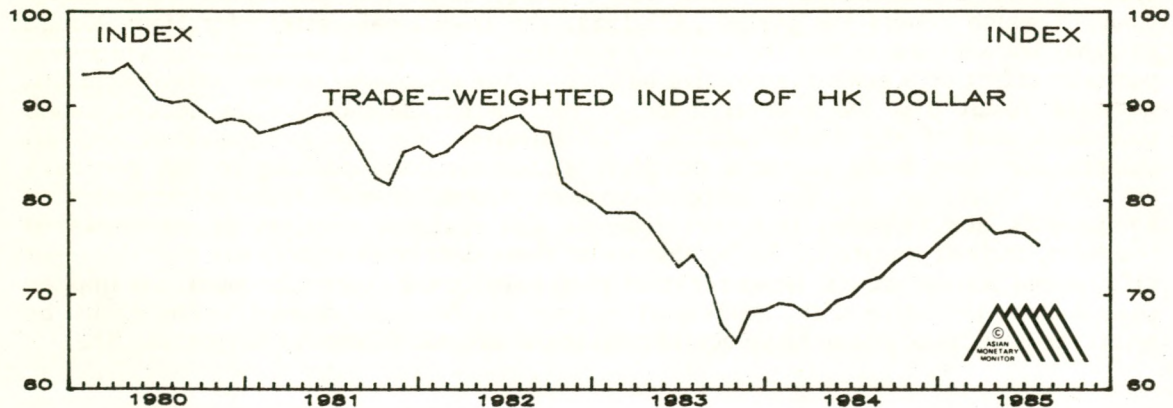
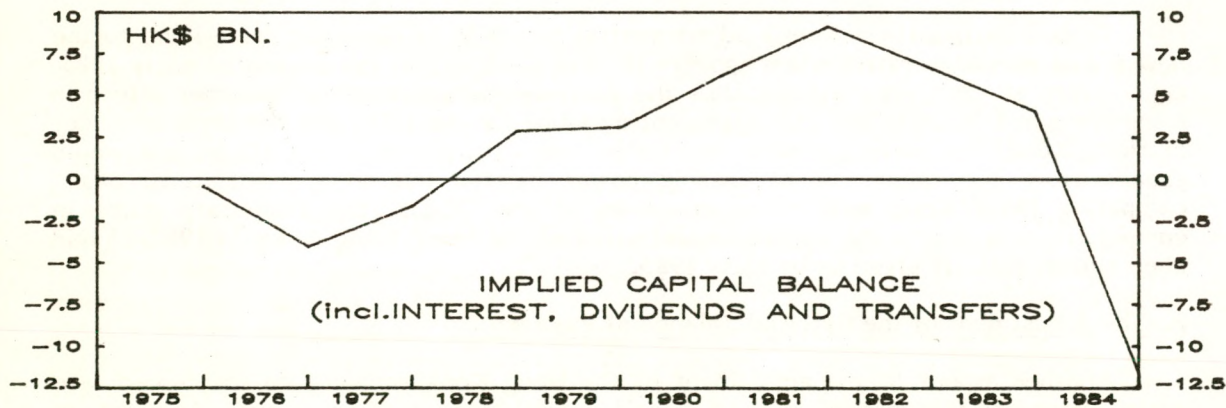
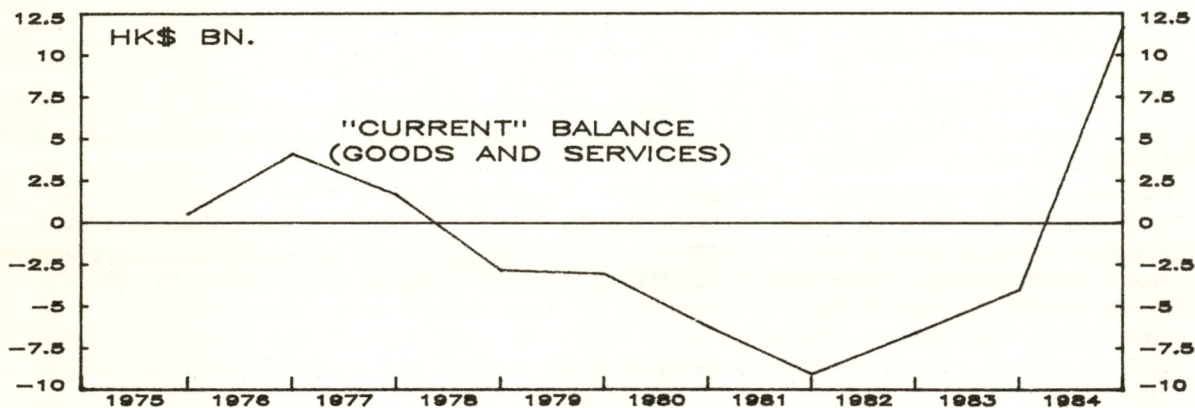
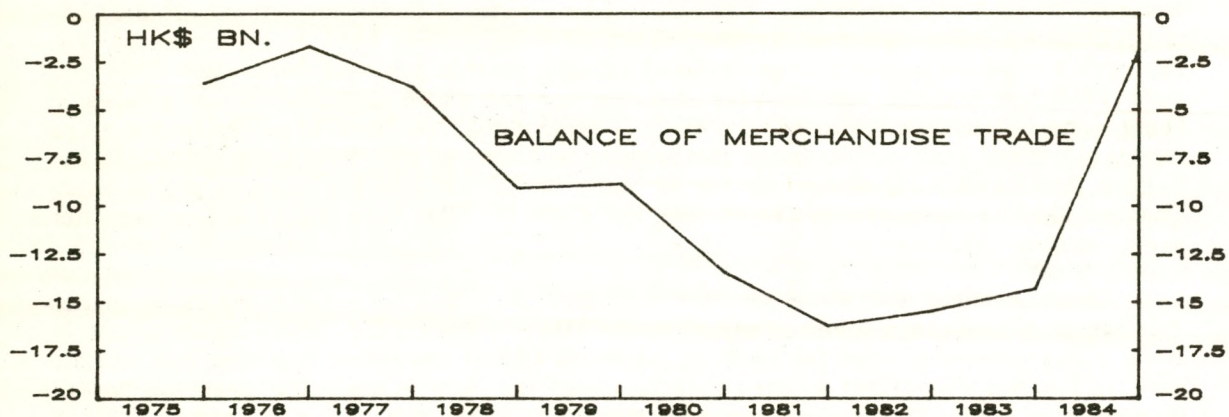
The sharp depreciation of the Hong Kong dollar in 1982-83 made Hong Kong much more competitive than its main trading partners, and helped to stimulate the export led boom of 1983-84. Allowing for Hong Kong's higher rate of inflation the gain in competitiveness between 1982 Q3 and 1983 Q3 was about 16%. Once the currency had been linked to the US\$, however, Hong Kong's competitiveness became subject to the level of the US\$, and as the US\$ appreciated through 1984 and up to March 1985 Hong Kong lost the competitive edge it had gained through currency depreciation in 1982-83. In the period January-June 1985 the index of Hong Kong's competitiveness relative to OECD countries averaged 95.2, up some 17.8% from its level of 80.8 in October 1983, and only some 3% lower than its average level of 98.3 in the period January 1980 to September 1982.

To summarise, Hong Kong's adjustment in terms of its domestic price level to the new linked exchange rate system appears to have been largely completed by early 1985. On a bilateral basis vis-a-vis the USA the year-to-year increase in consumer prices in Hong Kong had fallen below the equivalent measure for the USA, and the level of prices in Hong Kong was moving almost exactly in line with prices in the US as one would expect from the theory of purchasing power parity; and on a multilateral basis, comparing Hong Kong with other countries in the OECD, the temporary gains in competitiveness due to the sudden depreciation of the Hong Kong dollar in 1982-83 had been almost entirely given up by early 1985.

2. The Adjustment of the External Balance of Payments

Another aspect of the adjustment of the Hong Kong economy to the linked rate system concerns the changes in Hong Kong's overall balance of payments. As shown in Chart 3 which covers the period 1975-1984, the traditional pattern for Hong Kong's external transactions is that the territory operated a balance of trade deficit which was partially offset by a generally positive balance on the remainder of the current account, with the result that the general shape of the current balance (in the second panel) resembles that of the trade balance. Unfortunately the measured current account balance for Hong Kong is not a complete statement corresponding to the generally accepted definition of the current account since several financial transaction components are excluded (viz. net interest and dividend receipts or payments of residents, and net transfers). In the absence of these data one can only say that since net official and private capital flows together must balance the current account, the implied capital flows (inclusive of the items omitted from the measured current balance) must be whatever is necessary to achieve equilibrium in the overall balance of payments. The

HONG KONG: CHART 3 BALANCE OF PAYMENTS



basic equation is:

$$\text{Current Balance} + \text{Capital Balance} = 0$$

or,

$$(\text{Visible Trade Balance} + \text{Invisible Balance} + \text{Transfers}) + (\text{Official and Private Capital Balance}) = 0$$

The measured components for Hong Kong are:

$$\text{Visible Trade Balance} + \text{Certain Services} = \text{"Current Balance"}$$

The components which are not measured are:

$$\text{Private and Official Capital Balance} + \text{Transfers} + \text{Other Invisibles} = \text{"Implied Capital Balance"}$$

As shown in Chart 3, there was a dramatic improvement in Hong Kong's trade and measured "current" balance in 1984, resulting in a measured surplus of HK\$12 billion on "current" account. The counterpart of the current surplus, however, must have been an equivalent negative figure on capital account, shown in Chart 3 in the Implied Capital Balance.

During late 1982 and through to September 1983 there was almost certainly a net capital outflow from Hong Kong residents. After the linking of the Hong Kong dollar to the US\$ in October 1983, some residents would have repatriated funds held overseas partly because of a return of confidence, and partly because of the high real interest rates newly available on Hong Kong dollars due to the linked rate system. Once the Sino-British Agreement on the future of Hong Kong was announced and initialled in September 1984, there was probably some further repatriation of funds by residents, and non-residents also began to move funds back into Hong Kong. However, it would be entirely rational for residents to wish to export capital from Hong Kong while non-residents might simultaneously wish to increase their investments in Hong Kong. The overall capital flow would depend upon the net balance between residents and non-residents.

Supposing Hong Kong residents (including corporate entities, government etc.) saved 15% of their gross income, or 15% of GDP i.e. about HK\$37.5 billion in 1984 (this represents about HK\$6800 per capita). If 5% of gross incomes were placed overseas as an insurance policy or as some kind of nest-egg for future consumption, i.e. about HK\$12.5 billion p.a., what would happen to investment in Hong Kong? On the surface it would appear to fall from HK\$37.5 billion to around HK\$25 billion, but the actual final figure will depend on the net inflows from non-residents. As direct investment in Hong Kong in 1984 amounted to some HK\$11.5 billion, it seems reasonable to assume that the inflow for portfolio investment and in the form of bank loans etc. could be substantially greater. As a rough estimate, therefore, the estimate of a reduction in the overall capital inflows in 1983 and a shift to a net capital outflow in 1984 as shown in Chart 3 is by no means inconceivable. There has clearly been a radical shift in Hong Kong's trade and current accounts as measured; the counterpart to these shifts on current account suggests a reduction in the capital inflow, and perhaps even an overall capital outflow. This follows from the simple arithmetic of the balance of payments: the greater the surpluses on current account, the greater must be the deficits on capital account.

3. The Adjustment of Hong Kong's Credit and Capital Markets

Under the floating exchange rate regime in Hong Kong between 1974 and October 1983, the level of interest rates in Hong Kong was, to a significant degree, independent of interest rates overseas. With the implementation of the linked exchange rate system

for the Hong Kong dollar, the Hong Kong currency became effectively unified with the US dollar, being defined as a different denomination of the US currency. In the same way the Hong Kong credit markets are now in effect an extension of the US credit market in the sense that Hong Kong borrowers and lenders can select from the available opportunities offered by both markets while taking very little exchange risk. If borrowers find it cheaper to borrow in Hong Kong dollars and lenders find it more profitable to lend in US dollars, these differences will in the theory be exploited until the difference between the two markets is reduced to little more than the transaction cost of moving funds from one market to the other.

In practice the cost of credit (or the returns available on loanable funds) in the US dollar market differs substantially from rates available in the short term market in Hong Kong. This is partly because the two currencies are not viewed as perfect substitutes and therefore the costs of switching between the two are in reality quite high. For example in Hong Kong there is no facility for clearing US dollar cheques, and therefore local banks do not offer US\$ demand deposits with facilities for writing cheques drawn in Hong Kong. The US dollar cannot be used as a true transactions medium in Hong Kong; it can only be used as a store of value in the form of a savings or other term deposit. For the large-sized firm or other institutional depositors who may maintain US\$ checking accounts in New York or elsewhere switching between the two currencies to find the better yield may not be very costly, but for the small individual the cost in terms of giving up liquidity is substantial.

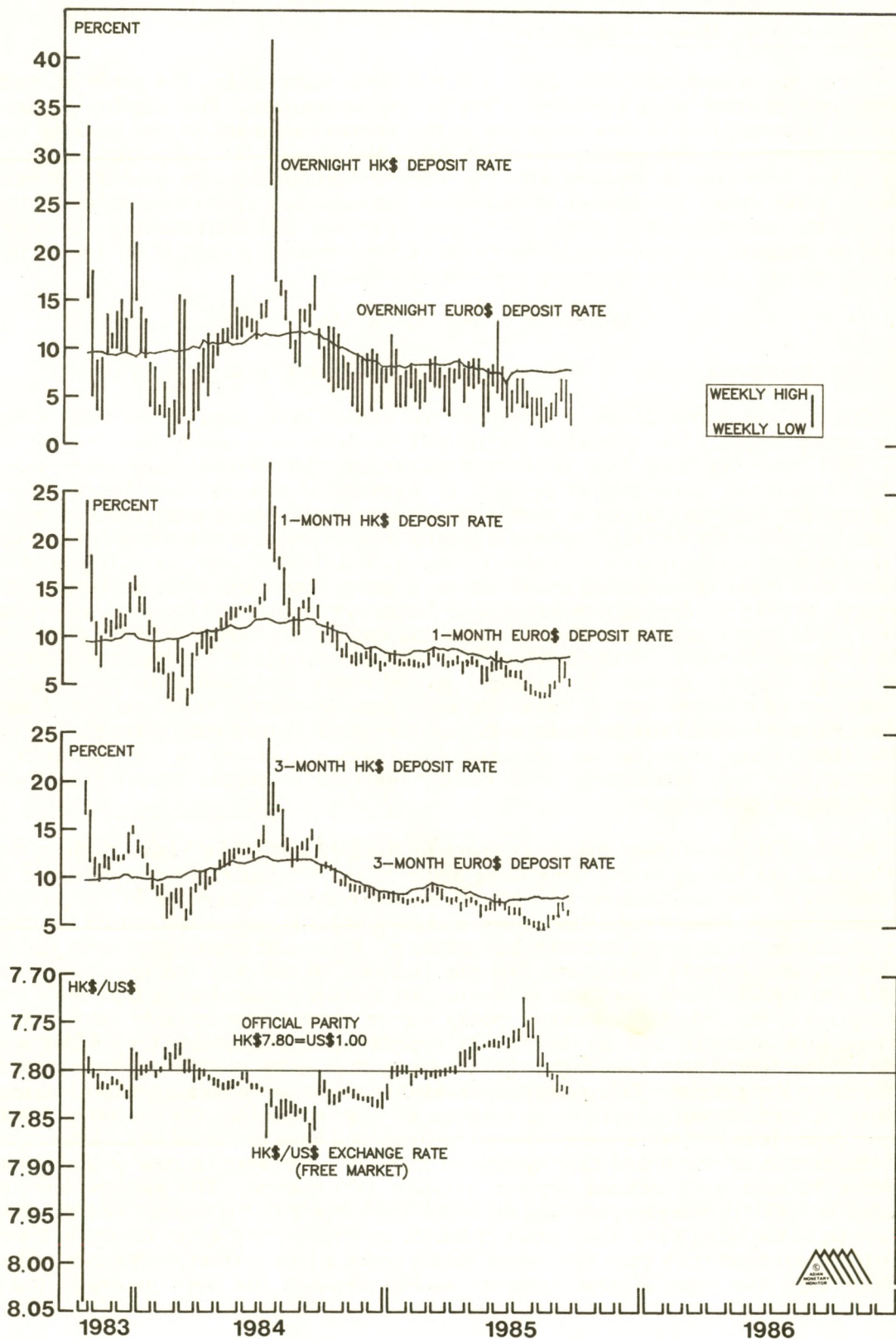
Also, the equalisation of interest rates in the two currencies requires that the money supply in Hong Kong adjusts to the equilibrium size appropriate to interest rate parity. However, the linked rate system was set up in such a way that only the banks are able to exchange HK\$ banknotes for US dollars at the official rate with the Exchange Fund. As explained in a previous issue of AMM, banks have limited incentive to conduct these cash arbitrage transactions because their demand for cash is a derivative demand: to satisfy the need to meet withdrawals of deposits. The level of deposits in turn is not rapidly altered when, for example, depositors want to shift from Hong Kong dollars to US dollars because for every seller of Hong Kong dollars there must be a buyer of Hong Kong dollars. This means that in the event of an external drain (i.e. a demand for foreign currency as opposed to a demand for domestic cash currency) the pressure for contraction of the money supply and hence the adjustment of interest rates is much weaker than it would be if private individuals or firms were able to redeem Hong Kong currency directly at the Exchange Fund's official parity.

In short, due to the system of partial rather than full convertibility (i.e. only banks having the right of access to the Exchange Funds official rate, not all individuals), the adjustments to Hong Kong's money supply are slower and more imperfect than they should be. Hence, supposing the demand for credit in Hong Kong is weaker than in the US, the supply of loanable funds in Hong Kong is not reduced as quickly as it should be to restore interest rate equality between the two markets. For this reason Hong Kong's interest rates can and do continue to diverge from US levels for sustained periods. Nevertheless, the mechanism does appear to work sufficiently well that the general tendency is for Hong Kong interest rates to fluctuate around US interest rates of equivalent term over periods of a few months, as illustrated in Chart 4. This conclusion is necessarily tentative and may need modification after a longer trial of the linked rate system.

One development in Hong Kong's credit or capital markets which deserves mention here is the recent evolution of a long term fixed interest market, which is a direct result of the linked exchange rate mechanism. Prior to the linked rate system there was no real standard of reference for long term borrowers in Hong Kong, and the only debt issues in this area were government or government-guaranteed corporations. Since these issues were occasional and spasmodic at best there was no choice of maturities available to the investor, and no meaningful yield curve existed. With the implementation of the

HONG KONG: CHART 4

HK\$-US\$ INTEREST RATE DIFFERENTIALS
AND FOREIGN EXCHANGE RATE vs. OFFICIAL PARITY



linked rate system borrowers have for the first time been able to use yield curves from the US market as a standard of reference, and during the period January to August 1985 there have accordingly been a series of long term debt issues amounting to HK\$2.9 bn, marking a major new development of the Hong Kong capital market.

4. Behaviour of the Monetary Multipliers

Under the linked rate mechanism for the Hong Kong dollar, the price of each nominal unit of Hong Kong currency is set by the authorities. The quantity of base money is, however, free to vary according to the amount demanded at that price by the banks and by the non-bank public, (see AMM Vol. 8 No. 6 pp.12-17). Since banks in Hong Kong do not hold reserve deposits with the monetary authorities, the quantity of base money is quite simply the amount of banknotes and subsidiary coin in the hands of the banks and the non-bank public, or the total currency issued. The total quantity of money, defined as deposits and currency in the hands of the non-bank public, is related to the total currency by a ratio known as the monetary multiplier.

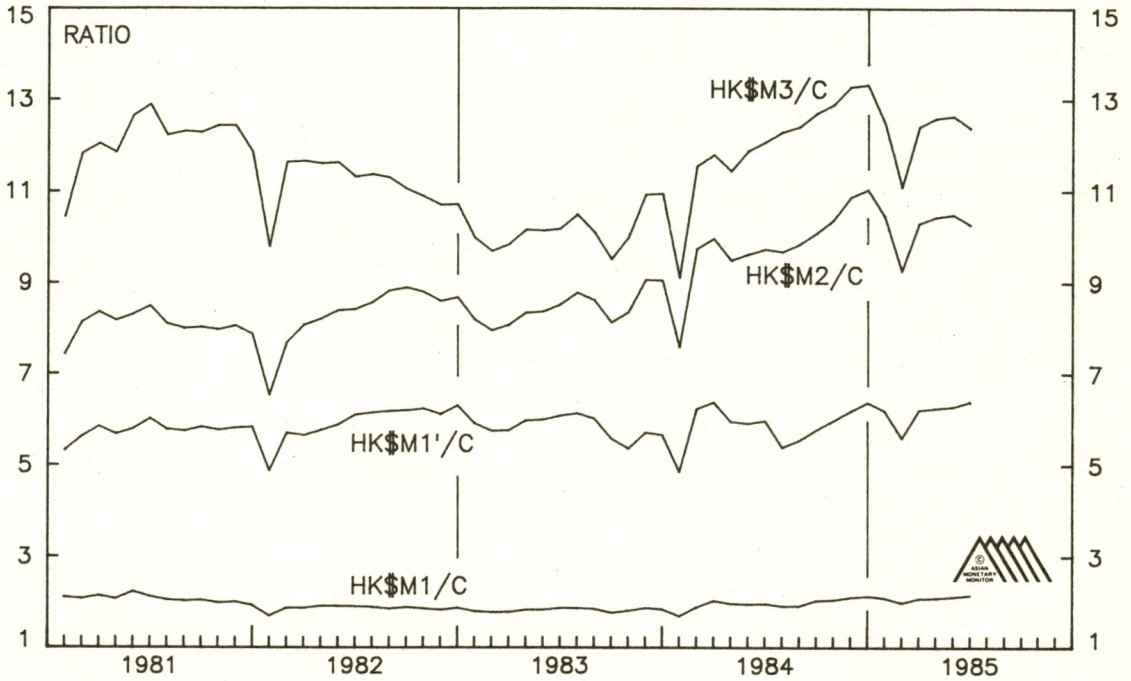
$$M = m \cdot C \quad \text{and} \quad m = M/C$$

where M is the money supply, m is the multiplier, and C is the total currency issued.

Chart 5 shows the monetary multiplier for various definitions of the Hong Kong dollar money supply. The multiplier for HK\$M1 has been very steady over the period since 1981, showing only fractional declines around January/February each year, associated with the conversion of deposits to currency at Chinese New Year. Other multipliers for wider definitions of money show the downward spike much more strongly than the multiplier for HK\$M1, implying a greater proportionate drawing down of savings and time deposit accounts for conversion to cash at this time of year. In most years the Chinese New Year phenomenon shows up as a sharp downward spike in January or February. In 1983 the decline was spread over January, February and March as a rounded curve. Later in the same year there was another decline associated with the currency crisis of August-October. Probably there was both a reduction in the quantity of Hong Kong dollar deposits as the capital flight gained momentum, and some hoarding of currency out of concern that if the crisis were prolonged banks could well be closed whereas payments could still be made with cash currency. Immediately after the linking of the Hong Kong dollar to the US dollar there was a recovery in the multipliers, suggesting that such precautions were rapidly reversed as people returned to their previous modes of behaviour.

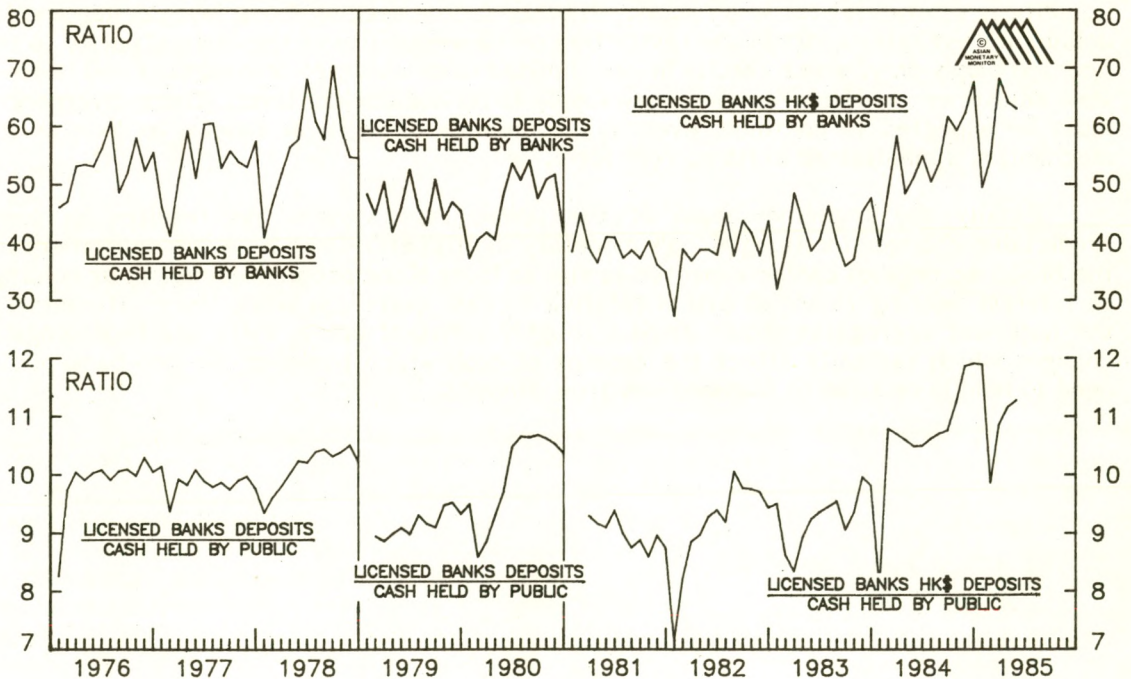
However it seems clear that multipliers for HK\$M2 and HK\$M3 have risen in the aftermath of the linking of the Hong Kong dollar to the US dollar. Once confidence in the stability of the local currency was restored, there was a resurgence in the general willingness to hold Hong Kong dollar assets, including deposits, whereas the need for cash for transactions purposes did not alter significantly. This could account for some rise in the HK\$M2 and HK\$M3 multipliers, but one is bound to ask why the multipliers for HK\$M1 and HK\$M1' have not risen as much. An obvious explanation is that since the introduction of the linked rate scheme, money market deposit interest rates, particularly on large time deposits, and on deposits at deposit taking companies (in HK\$M2 and HK\$M3 respectively) have been higher in real terms than under the floating rate system for the Hong Kong dollar. This alone has provided an incentive to hold a greater relative quantity of such deposits relative to holdings of cash currency. On the other hand, demand deposits in HK\$M1 are non-interest bearing, and have remained so subsequent to the introduction of the linked rate system so that there has been no new or additional incentive to hold more demand deposits relative to currency. The savings deposits included in HK\$M1', however, are largely retail and subject to the deposit interest rate agreement of the Hong Kong Association of Banks, an arrangement which results in lower rates for small depositors than they would obtain under a free market mechanism. Thus although even the level of real rates on savings deposits has been generally more

HONG KONG: CHART 5 THE MONETARY MULTIPLIERS



C Denotes Total Cash Currency
HK\$M1' equals sum of HK\$ components of Demand Deposits, Savings Deposits and Cash held by public.

HONG KONG: CHART 6 MONETARY DETERMINANT RATIOS (FOR HK\$M2)



favourable than under the old regime, nevertheless the increase has not been sufficient to raise the HK\$M1'/C ratio nearly as much as the broader ratios. This is clear evidence that the interest rate agreement discriminates against small depositors.

The rise in the HK\$M2 multiplier can be broken down into two contributing elements: a rise in the deposit-to-cash ratio of the non-bank public, and a rise in the banks' deposit-to-cash ratio, as shown in Chart 6. The rise in the ratio of deposits-to-cash held by the non bank public almost certainly reflects the same two phenomena mentioned earlier - the renewed willingness of the non bank public to hold HK\$-denominated claims on the banks following the pegging of the Hong Kong dollar to the US dollar, and the attraction of Hong Kong dollar time deposits paying positive real rates of interest on a consistent basis in line with US dollar deposits following the implementation of the linked rate system. The rise in the deposit-to-cash ratio of the banks since October 1983 reflects the same phenomena, the key point being that banks need to hold smaller amounts of cash against time deposits than against demand deposits, and this has allowed their overall deposit-to-cash ratio to rise.

FORECAST: Hong Kong's domestic prices have now adjusted under the linked rate system to price levels in the US in the sense of attaining levels which are compatible with equilibrium in the balance of payments. In future the overall price level in Hong Kong will fluctuate around the price level in the US, keeping Hong Kong's economy roughly competitive with the US at the given exchange rate. Differences in inflation rates will surely emerge over the short to medium term, but over time these will be small (where they are not due to different composition of the indices under comparison). A dramatic illustration of the reduction in Hong Kong's inflation rate will be a sharp deceleration in the GDP deflator from 9.8% in 1982 to perhaps 5% in 1985. On the balance of payments front Hong Kong may continue to enjoy trade and current account surpluses, but this should be interpreted cautiously since the counterpart of a large current account surplus must be a net capital outflow.

Interest rates in Hong Kong's credit markets continue to diverge from the levels of equivalent maturity instruments in the US dollar markets. The reason is that the cost of switching from Hong Kong dollars to US dollars while retaining the same degree of liquidity is substantial for small sums. Another factor keeping Hong Kong dollar and US dollar interest rates apart is the restriction on convertibility at the official parity to the licensed banks only, which results in very limited cash arbitrage transactions and hence a slow adjustment of Hong Kong's money supply to its equilibrium level. These divergences must be expected to continue, even in the absence of political shocks, as long as the mechanism is maintained in its current form.

Finally the implementation of the linked rate system has resulted in some predictable changes for Hong Kong's monetary multipliers. Over time the multipliers for the broad aggregates can be expected to rise as Hong Kong people increase their holdings of interest bearing financial assets relative to cash currency, while the multipliers for the narrower aggregates should remain roughly constant unless there are technological changes which radically affect the amount of cash which banks or the non-bank public need to hold in relation to transactions-type deposits.

PEOPLE'S REPUBLIC OF CHINA

PROBLEMS OF MONETARY CONTROL

Given the recent rapid growth of the Chinese economy and China's growing trading links with East Asia and the rest of the world, 'free-market' oriented reforms which have taken place in agriculture and industry under the Four Modernisations Program of December 1978 and accelerated last year with the adoption of the Decision on Reform of the Economic Structure, have attracted much attention in the western world. Relatively less attention has been paid to the considerable reforms of the banking system which have also taken place since 1979. Yet these reforms, and further reforms which must follow if China is to have a monetary system adequate to cope with the growing financial demands of its rapidly growing and increasingly complex economy, are essential parts of the current 'modernisation' program. Indeed, it was essentially the inadequacies of the monetary system which lay behind the explosion in money supply and sharp drop in foreign exchange reserves last year and the beginning of this year, which in turn were major reasons behind the current policy - induced slowdown in the Chinese economy. This article attempts to trace briefly the development of the Chinese banking system and explain the workings of, and problems inherent in, the current monetary system.

The post-1949 Chinese banking system was originally based on the Soviet model, with recent developments dating back to 1979. Prior to 1979, nearly all of the functions which would under western 'orthodox' monetary and fiscal arrangements be fulfilled independently by the Central Bank, the Commercial Banks and the State Treasury were the domain of one 'bank' - the People's Bank of China. The foreign exchange and international banking functions were, and still are, the domain of the Bank of China, which utilises the foreign reserves of the country under the supervision of the People's Bank. One other 'bank' - the People's Construction Bank of China was, before 1979, not a bank in the true sense of the word. Operating under the administration of the Ministry of Finance and State Capital Construction Commission, it acted merely as a conduit for State-appropriated funds earmarked for capital construction purposes. In fact, in this sense the Construction Bank was an extreme example of a general principle which was that the primary function of the banking system as a whole was to act as the government's fiscal agent, disbursing state funds and overseeing their use. People's Bank of China did, of course, take deposits (in fact enterprises and institutions were obliged to deposit all their cash above a stipulated amount) and make loans, at low interest rates, in accordance with the overall state credit plan. However, the banking system was viewed as merely one of the channels through which the state managed and allocated funds.

China remains an essentially cash-based economy. In 1978, according to IMF data, roughly a quarter of the broad money supply (M2) comprised currency in circulation (compared to, for example, 6% in the United States). Individuals are not allowed to use chequing accounts and the bulk of bank deposits are deposits of enterprises and institutions (although the share of individual savings deposits in total deposits is growing). Furthermore, prior to 1980, the government had made very little use of bond issues to finance the government deficit, instead financing the deficit by literally printing money.

Thus, pre-reform banking arrangements formed an extremely simple and primitive fiscal and monetary system which depended, primarily, on flows of cash between the government, banks, and the public. This is best seen by considering a reconciliation of the basic monetary formation equation for an orthodox monetary system with the pre-reform Chinese monetary system.

In an orthodox monetary system, the following simple identity is often used to describe the asset counterparts to an increase in the money supply:

$$\Delta M3 \equiv \Delta L - \Delta \text{Non D} + (G-T) - \Delta B + (X-M) - K$$

where

- $\Delta M3$ is the increase in the broad money supply
- ΔL is the increase in bank lending
- $\Delta \text{Non D}$ is the increase in banks' non-deposit liabilities
- $G-T$ is the public sector deficit (= Government expenditure less Taxation)
- ΔB is government bond sales to the non-bank private sector
- $X-M$ is the current account surplus on the balance of payments, and
- K is capital outflows from the non-bank private sector.

In the pre-1979 Chinese monetary system, as the government did not issue bonds and banks' non-deposit liabilities and capital outflows can be judged to have been insignificant, this identity reduced to

$$\Delta M3 \equiv \Delta L + (G-T) + (X-M)$$

or, given that the money supply ($M3$) comprises bank deposits (D) and cash held by the non-bank private sector (C), to

$$\Delta C \equiv (\Delta L - \Delta D) + (G-T) + (X-M) \quad (1)$$

Thus, in theory, the three main components (ignoring the current account surplus/deficit) of this identity would be determined simultaneously to ensure that the targeted growth of the economy was achieved. $\Delta L - \Delta D$, or the banking sector's 'deficit' would effectively be determined by the overall credit plan while $G-T$ (the government's budget deficit) would be determined by the state budget plan. These two plans would have to be coordinated to ensure that the increase in currency in circulation (ΔC) implied by the budget and banking sector deficit (or surplus) would be appropriate to 'finance' the growth of output in the economy suggested by the national economic plan at a stable level of prices (according to the quantity of money identity $MV \equiv PY$).

When viewed in this light it can be seen clearly that the banking system in pre-reform China was more of an extension of the government's fiscal operations than a true banking system, there being little difference in practice between bank lending and government spending or between bank deposits and government revenues (particularly given that the recipients of government funds or bank loans were enterprises which were anyway owned by the state). Control of the money supply, which meant control of currency in circulation, was achieved as a by-product of the government's direct control of its own spending and of bank lending.

The movement to economic reform, begun by the Four Modernisations Program launched in December 1978, necessarily involved some reform of the banking system. Economic reform has involved, amongst other things, the granting of greater autonomy to enterprises in management, wage setting etc., and making enterprises responsible for their own profits and losses. Reforms in these areas would not have been possible without reform of the banking system as the complete control of bank credit and deposits implied by the pre-1979 banking system was incompatible with enterprises having a degree of autonomy in their investment and output decisions.

The main thrust to the bank reforms which have taken place since 1979 has been to substitute bank lending for state-budget financing in the financing of economic activity and to give the banks greater autonomy in issues such as deciding whether, and to whom, to grant loans, and for what periods. To this end, starting in 1979, an increasing amount of capital construction investment has been financed through loans from the People's Construction Bank rather than through state appropriations as before. In 1979, also, the Agricultural Bank of China was established as a specialist bank with the purpose of

serving the financing needs of the rural areas. Various other changes in the supervisory structure of the banking system were made at the same time, including the enlarging of the powers of the Bank of China and the creation of the State General Administration of Exchange Control to oversee foreign exchange control and the management of the Renminbi exchange rate.

However, the major development, which took place in September 1983, has been the establishment of a central bank, with the separation of the central banking and commercial banking activities of the People's Bank of China. The People's Bank of China was split into the Industrial and Commercial Bank which, since 1984, has undertaken all the commercial banking activities, and the People's Bank of China (PBOC) which now acts purely as the Central Bank and oversees the operations of the whole banking sector (comprising the Industrial and Commercial Bank, the Agricultural Bank of China, the Bank of China and the People's Construction Bank of China). Beginning this year a reserve requirement system was introduced under which the four banks have to maintain reserve deposits with the PBOC equal to 10% of their outstanding deposits. Banks earn interest on these reserves, currently at a rate of 0.36% per month (4.4% annual) and can borrow from the PBOC (up to a stated limit) at a rate of 0.39% per month (4.8% annualised).

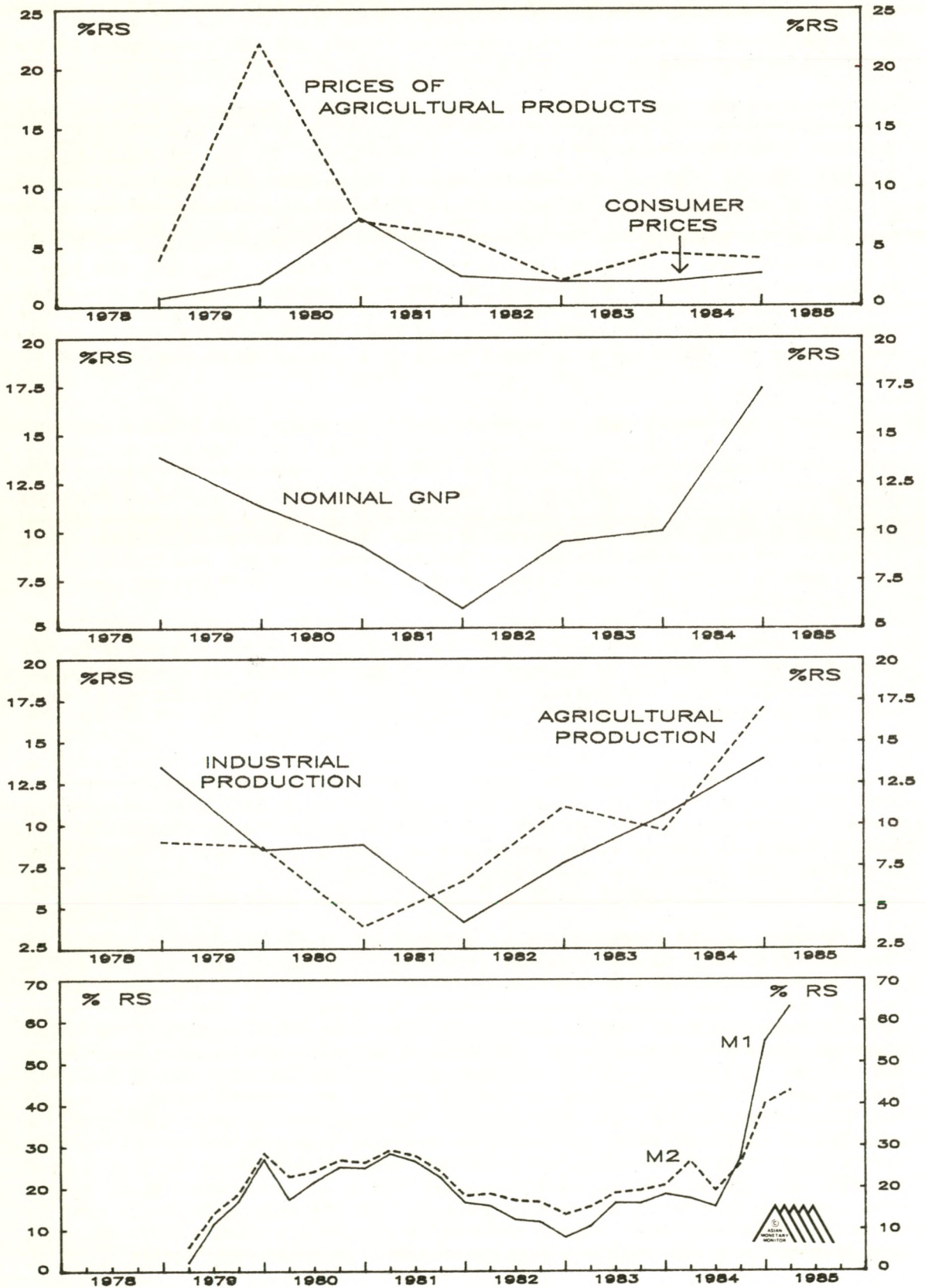
Other important changes in monetary and fiscal policy have taken place since 1979. On the monetary side, a stated aim of the banking reforms has been the adoption of a more flexible interest rate policy. The PBOC is now prepared to vary interest rates in response to economic conditions and to use interest rates as a tool of monetary policy. This represents a radical change from the pre-1979 policy, under which interest rates were fixed rigidly for long periods of time. Thus, on August 1st 1985 the PBOC raised interest rates on deposits and loans for the second time this year (the first time having been in April). In contrast, over the whole period 1953-1979 interest rates were only changed three times.

On the fiscal side, beginning in 1980 the government has issued bonds to finance part of its budget deficit as opposed to simply printing money to cover the whole deficit. The 1980 bond issue represented the first issue of government debt since limited bond sales to individuals during the 1950s.

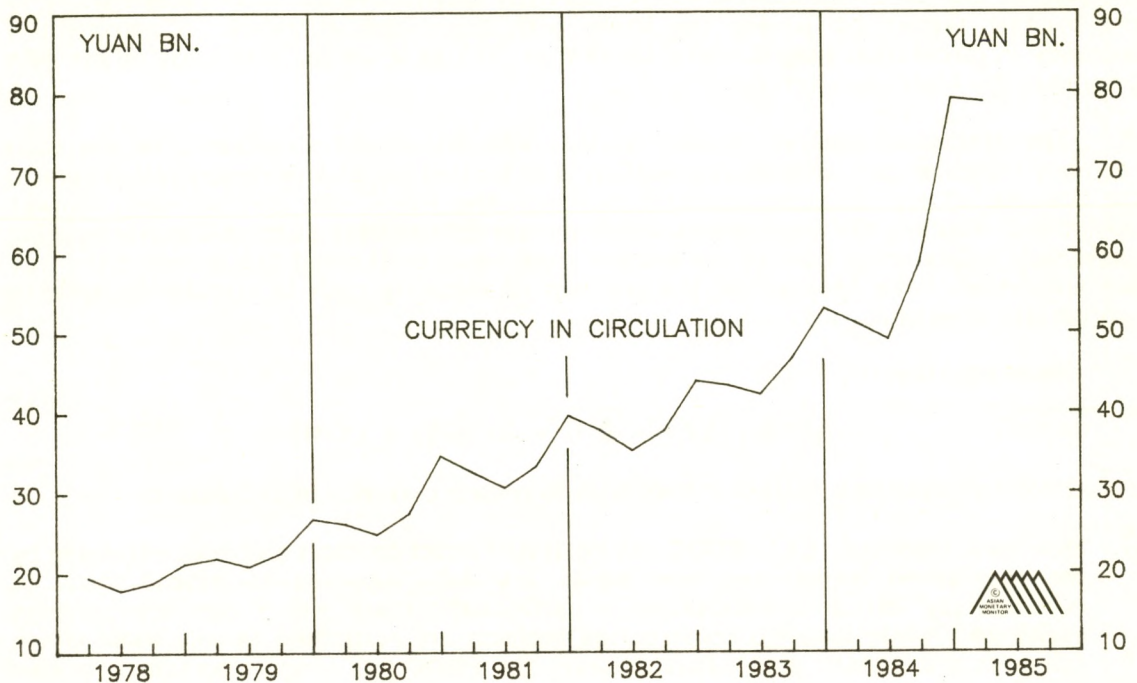
Thus, it might appear that the Chinese monetary system at its current stage of development and reform is now very similar to an orthodox western monetary system. A monetary base can be defined as the liabilities of the Central Bank (bank reserves plus currency in circulation) with the asset counterparts being the foreign reserves, and the Central Bank's net lending to the government and lending to the banking system. The government can finance its budget deficit by issuing bonds, or borrowing from the Central Bank which then prints money to finance the government's deficit spending.

However, at the current stage of development of China's banking system the resemblance to an orthodox monetary system is more superficial than real and in practice the system functions more as described by equation (1). The PBOC has no 'market' means, such as open market operations, of operating on bank reserves, which tends to mean that bank reserves and the monetary base are a function of the money supply as opposed to vice-versa in a conventional monetary system. More importantly, the relatively primitive level of development of China's financial system (in which cheques are rarely used and most transactions are in cash) probably makes a monetary base approach to monetary control inoperable. Although tending to fall over time, the public's cash-to-deposit ratio, and hence the monetary base as a fraction of the total money supply, remains very large and potentially very variable. As at the third quarter of 1984, currency in circulation still comprised 23% of the total broad money supply. Thus any large increase in the demand for cash currency relative to the demand for deposits for whatever reason, must be provided for through an expansion of the monetary base or otherwise it will result in a large contraction in the total money supply.

CHINA: CHART 1 MONEY, OUTPUT AND PRICES



CHINA: CHART 2 CURRENCY IN CIRCULATION



A classic example of the problems inherent in the current monetary system was provided by the explosion in currency in circulation in the fourth quarter of last year and the authorities' subsequent attempts to bring the money supply back under control.

In the latter months of last year a number of factors conspired together to increase simultaneously and massively both the public's demand for cash currency (as opposed to bank deposits) and also lending by the specialised banks. The relaxation of remaining restrictions on the granting of bonuses to workers by enterprises and the endorsement of the bonus policy in the October 1984 'Decision' resulted in a massive increase in the general level of salaries and bonuses, as factory managers sought to increase their popularity amongst the workforce by granting larger bonuses than other factory managers. The increase in the nation's total wage bill in the fourth quarter amounted to 46%, while bonuses grew by well over 50% in many areas. Bank lending exploded for similar reasons as provincial banks took advantage of their recently found independence to lend indiscriminately as investment in capital construction and the economy boomed. The government itself unwittingly encouraged excessive bank lending by announcing before the end of the year that the credit extension of specialised banks in 1985 would be limited, with the limit for each bank based on its total outstanding loans at the end of 1984. The announcement of this government ruling had the obvious but unintended effect of encouraging the provincial banks to lend aggressively before the end of the year in order to raise their credit limits for 1985. Total bank lending grew by approximately 30% in 1984, with the bulk of the growth occurring in the fourth quarter.

The huge bonus payments to enterprise workers had the effect of reducing the demand for bank deposits (largely held by enterprises) while raising the demand for cash currency (the form in which most workers keep the bulk of their financial assets), in effect an internal drain on the banking system. An increased demand for cash for transactions purposes was further encouraged by the general realisation that liberalisation of the price system to be undertaken shortly would probably lead to higher

prices in the economy (as indeed it did). With vastly increased lending and reduced deposits the banking sector's cash 'deficit' ($\Delta L - \Delta D$ in equation (1)) increased sharply. In the circumstances the PBOC had little alternative but to increase lending to the banking system by issuing the banks with more cash currency. Consequently, currency in circulation surged, rising by 49% in 1984 as a whole, with most of the gain coming in the fourth quarter.

The fractional reserve deposit system was introduced subsequent to the cash currency explosion but, as explained earlier, is of limited use as a monetary instrument in the absence of any financial markets in which the PBOC can conduct open market operations. Rather, the mechanisms which the authorities have at their disposal to bring the money supply under control are evident from equation (1), and this is indeed the way the authorities have approached the problem of reducing cash in circulation back to appropriate levels this year.

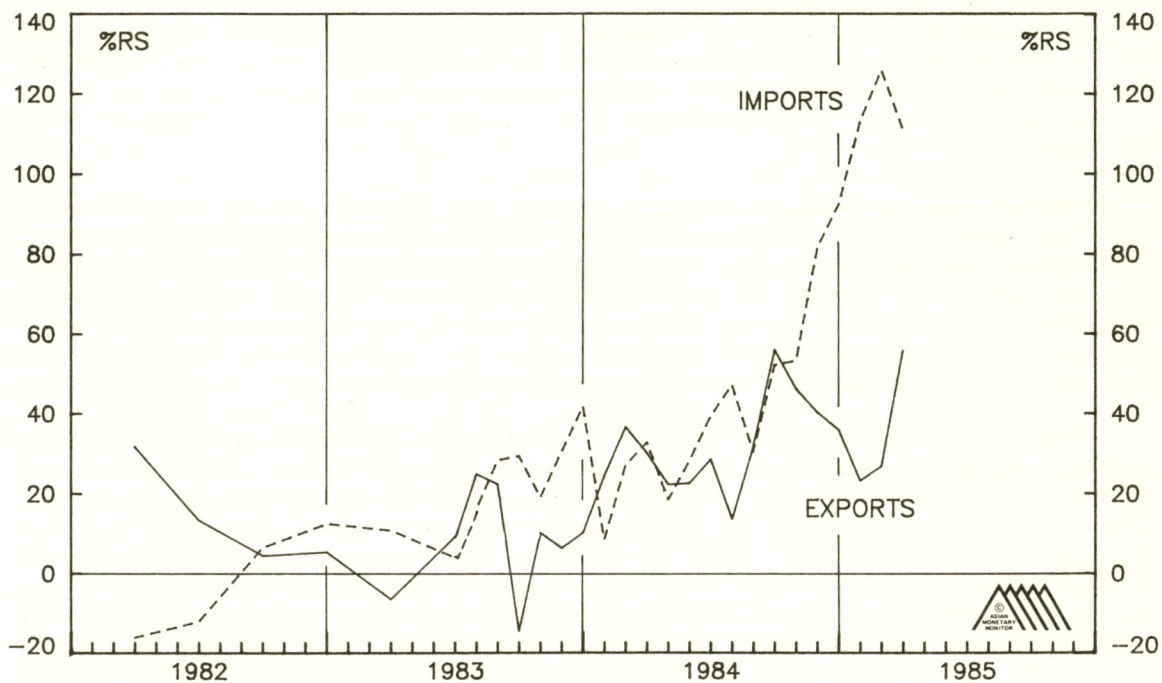
From equation (1),

$$\Delta C \equiv (\Delta L - \Delta D) + (G - T) + (X - M)$$

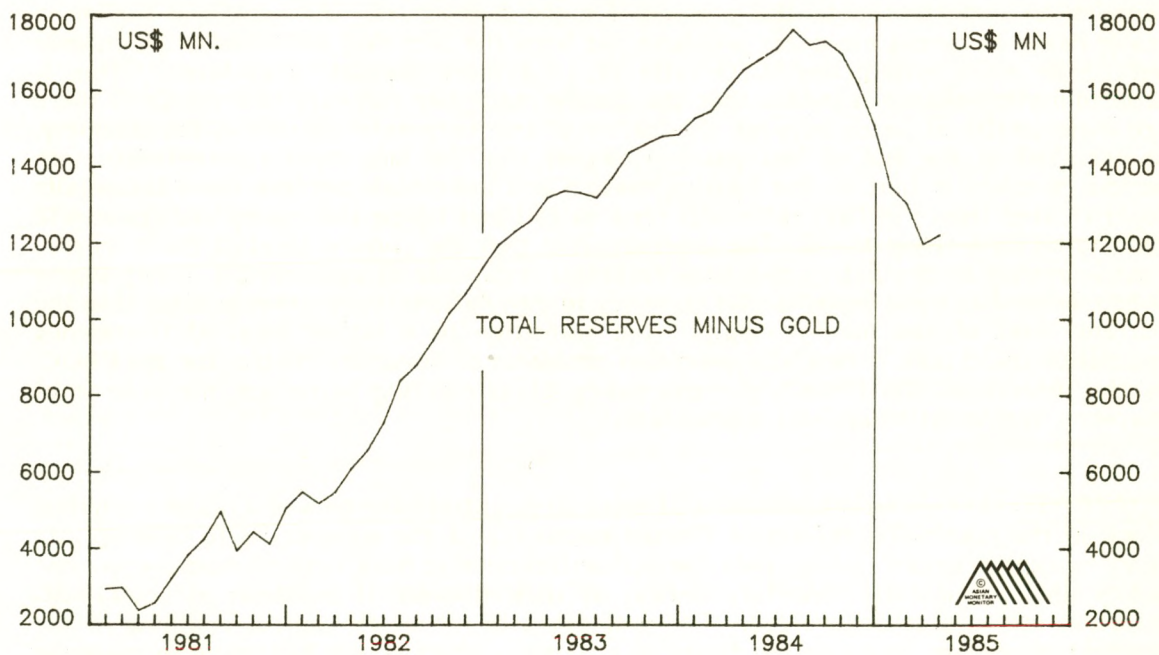
the authorities have four options if they wish to reduce currency in circulation:

- 1) Slow bank lending (ΔL). PBOC has instituted strict controls on credit extension by the specialised banks, and now banks are only supposed to extend loans to economically efficient enterprises - particularly those which can earn foreign exchange - while loans to construction projects are restricted to only those which fall within the state plan. Furthermore, the PBOC has strictly curtailed its own lending to the banking sector (an asset counterpart to the currency in circulation on its own balance sheet).
- 2) Raise bank deposits (ΔD). The most obvious way they can attempt to do this is to raise interest rates in the hope that this will encourage individuals to deposit surplus cash in the banking system. PBOC has so far raised the broad spectrum of bank interest rates twice this year, once on April 1st and once on August 1st. A less obvious way the authorities can attempt to raise bank deposits is to increase production of consumer goods by state enterprises. When the goods are sold for cash the state enterprises deposit the proceeds in the banking system. This method has been used extensively to absorb currency in circulation but its most obvious drawback is that it raises the level of activity in the economy at a time when the authorities are trying to slow the economy's growth. A further measure the authorities have taken which also reduces the possibility of an 'internal drain' of the sort which occurred at the end of 1984 is a salary freeze (at end-March levels) ahead of a wide scale salary reform.
- 3) Reduce the budget deficit ($G - T$). The government has implemented a tight fiscal policy with the aim of eliminating its Yuan 3 billion deficit by the end of the year. While spending is being controlled revenues have risen by about 20% year-on-year, as a result of new taxes. A 55% income tax on enterprise profits, introduced in mid-1983, was fully implemented by the end of 1984, and a progressive tax on bonuses has also been introduced. In the area of fiscal management the government recently announced the establishment of a decentralised treasury system under the control of the PBOC to ensure more efficient handling of the national budget and greater control over provincial government spending.
- 4) Increase the trade deficit ($M - X$). This is probably the most interesting and most unconventional of the methods the Chinese authorities have used this year in their attempt to bring the money supply back under control. In the first four months of the year the state spent more than US\$2 billion of its foreign exchange reserves importing consumer durables with the express purpose of reselling them to absorb

CHINA: CHART 3
EXPORTS AND IMPORTS GROWTH



CHINA: CHART 4
FOREIGN RESERVES



excess currency in circulation. In particular, more than Yuan 5 billion was absorbed through the purchase and resale of two million televisions, 500,000 refrigerators, 300,000 tape recorders, and 400,000 washing machines. Although effective as far as it goes, the obvious disadvantage of this method of monetary control is that it leads to a rapid depletion of foreign reserves. State spending of foreign reserves in this manner has been an important contributor to the rapid drop in reserves - which saw total reserves drop from US\$17.3 billion to less than US\$12 billion in the six months between September 1984 and March 1985 - which has now created problems of its own.

All of these methods of monetary control have their drawbacks, some of which have been noted above. However, the major drawback common to all the methods to some extent (except perhaps the last) is that they involve the implementation of non-market controls - controls on bank credit, controls on interest rates, controls on investment, controls on salaries. These are, of course, not out-of-place in a centrally planned system but the shift back to tighter control goes against the spirit of the current reforms, which is supposed to be towards a degree of liberalisation of the economy.

However, it must be said that in the short-term the PBOC probably has little choice in the implementation of current policies. Critics might argue that in an economy such as China's, monetary control is of little relevance. If the economy is growing at a 23% rate, as in the first half of this year, why does it matter if the money supply is growing at a similarly rapid rate? The problem with this argument is that any direct linkage between production and the money supply, to the extent that it exists at the moment, is likely to weaken as the financial system and economic agents become more sophisticated, as they must do if the economy is to develop further. In the past it may have been true to argue that, as the economy was centrally planned and essentially production-led, the money supply, and hence the level of demand in the economy, was more the result of, rather than a cause of, the level of economic activity and prices. However, assuming present liberalisation policies continue, as the economy becomes more decentralised then the normally observed relationships between money and the economy might be expected to begin to assert themselves.

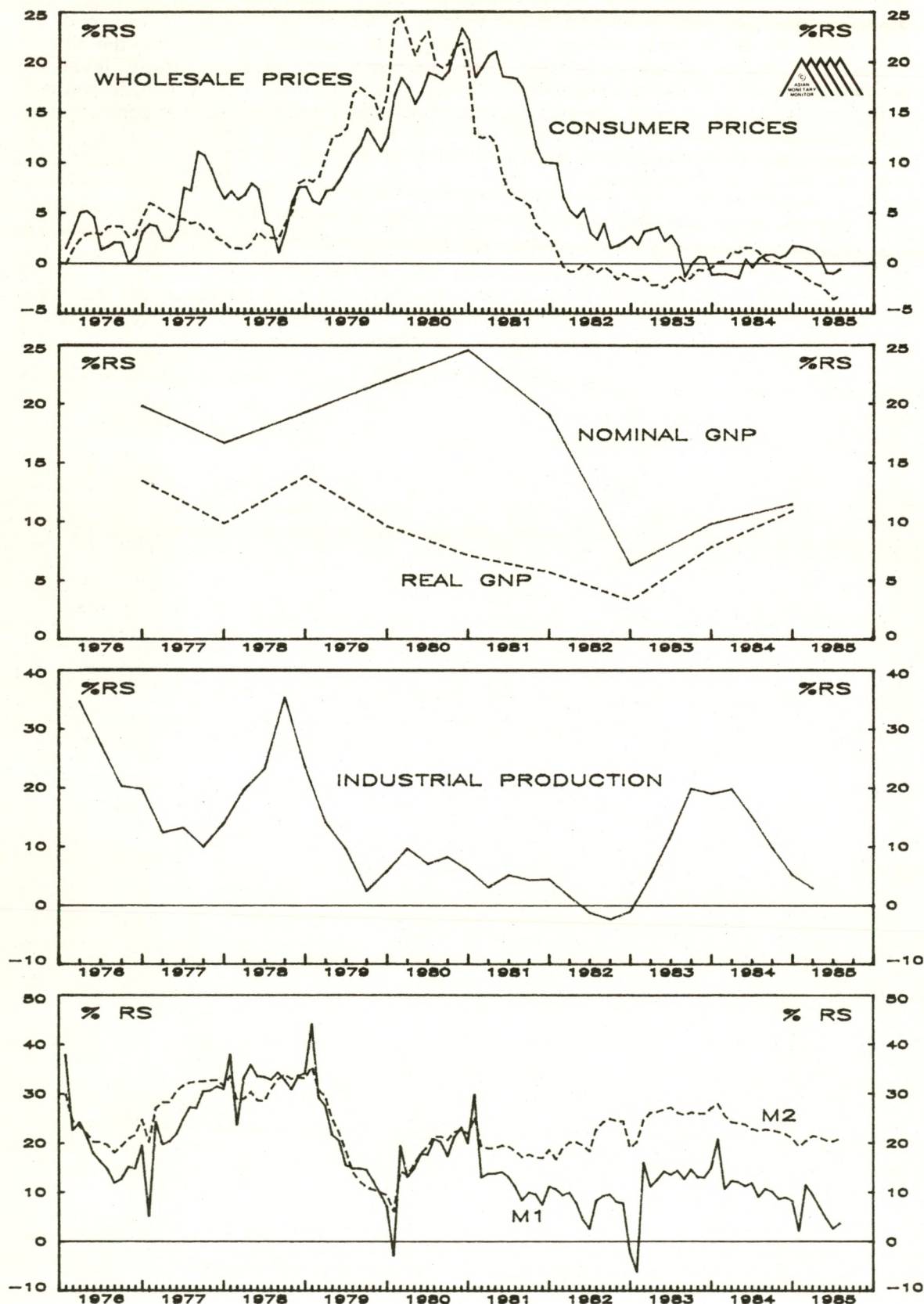
Given this, the variability of the non-bank sector's cash-to-deposit (C/D) ratio remains an important potential problem for the authorities. As explained earlier, a major cause of recent monetary problems has been the fact that individual's C/D ratio is very high while enterprises' C/D ratio is at a more normal, low, level. This is problematic because it means that the money multiplier can vary enormously if there are major shifts of funds between the 'personal' and 'corporate' sectors of the economy, as occurred at the end of last year. However, for the long-term a potentially more serious problem is that as the banking system and individuals become more financially sophisticated then the C/D ratio will tend to fall and hence the money multiplier will tend to be on a rising trend. The implication is that the current level of the monetary base (currency in circulation plus bank reserves) is capable of supporting a money supply (when defined as bank deposits plus currency in circulation) many times greater than the current level of the money supply. The transition to a higher level of the money multiplier could pose potentially enormous problems of monetary control for the PBOC. In the meantime, the PBOC's current policy of attempting to reduce the volume of currency in circulation appears appropriate.

FORECAST: In conclusion, problems of monetary control have proved a major stumbling block in the continuing reform of China's economy. If the economy is to develop in a more market-oriented fashion then the authorities need to have tools of macro-economic policy and, particularly monetary policy, at their disposal if problems of boom/bust, inflation etc. are to be avoided. The problem with monetary control in China at the moment is perhaps less with the financial structure, which is now beginning to resemble more an orthodox system, than with the still primitive nature of the economy, in which

cash currency is the favoured financial instrument for both transactions and savings purposes. If individuals were to make more use of the banking system then 'internal drains' such as occurred at the end of last year could largely be avoided. To this end, the authorities would be well advised to encourage, as opposed to restrict, the use of chequing accounts and raise interest rates to more appropriate 'market' levels to encourage the growth of bank deposits. However, even then the PBOC which, in common with Central Banks in many developing economies has a relative lack of sophisticated monetary instruments at its disposal, could face potentially enormous problems of monetary control as the money multiplier tends to rise in the transitional phase to a more developed monetary system.

The lesson to be learned from current and potential monetary problems in China is that reform of the overall economy must be undertaken very slowly and not outpace the reform and development of the financial system. If the authorities err on the side of attempting 'too much too soon' then, at best, the short and sharp stop/go cycle seen over the past year will become a recurring pattern in China's development. At worst, the authorities will abandon the economic reform programme altogether.

TAIWAN: CHART 1
MONEY, OUTPUT AND PRICES



TAIWAN

ALTERNATIVE POLICIES ARE NEEDED TO PROMOTE STRONGER ECONOMIC GROWTH

Confidence in the Taiwanese economy has been undermined this year by a marked reduction in real growth. Taiwan has generally proved to be a highly cyclical economy but the current downturn is reminiscent of some of the more serious previous recessions, such as 1974 and 1980 even though - unlike in those years - the world economy has continued to expand in 1985.

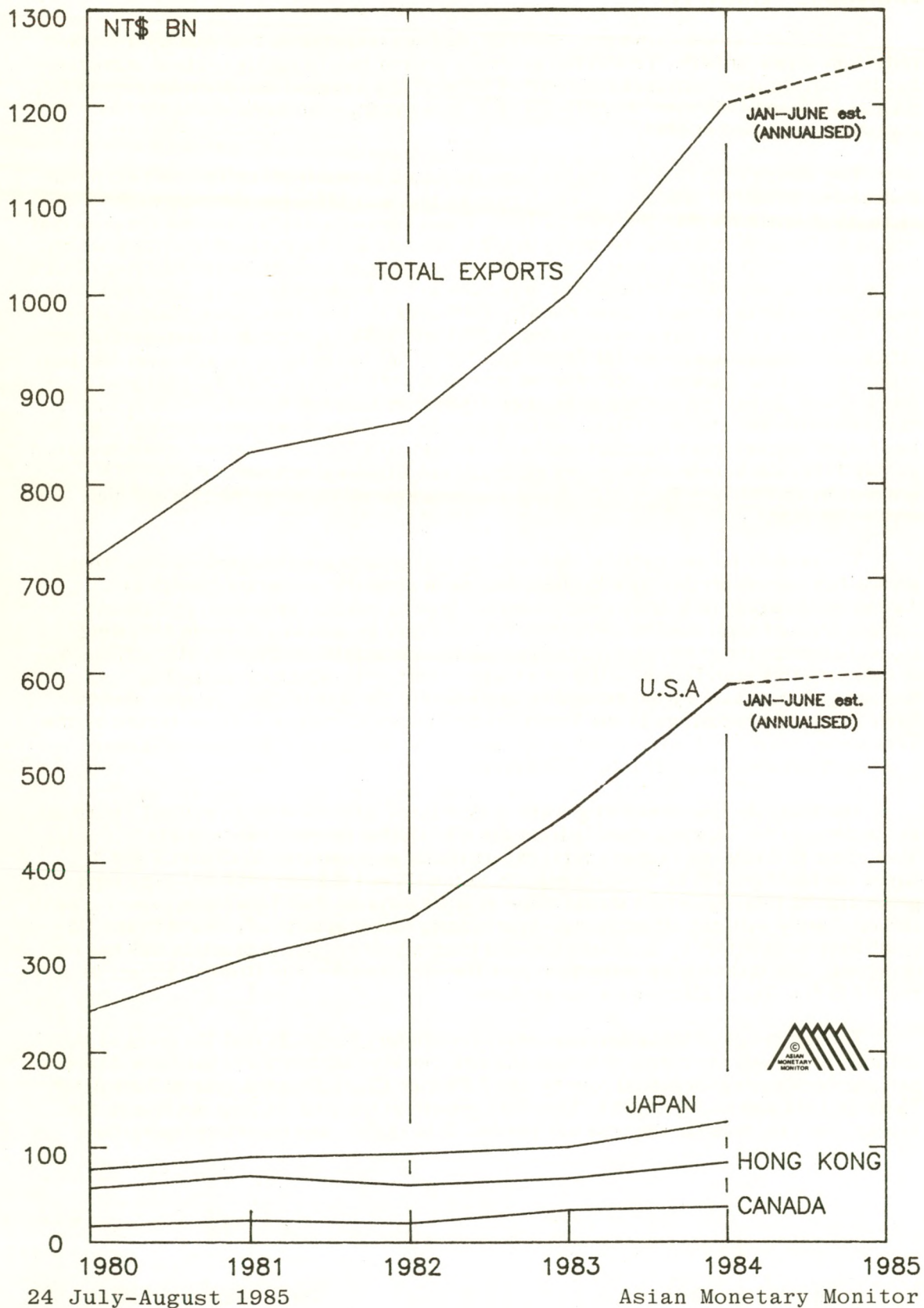
The slowdown in real growth has been reflected in nearly all of Taiwan's economic indicators. Industrial production, which rose by 14.1% in 1984, has slumped to show an increase of just 2.2% over the year to June. Export growth, which provided the principal engine to Taiwan's economic recovery in 1983, has also led the cyclical downturn which began during the fourth quarter of last year. The value of exports, which had risen 24.1% in the year to July 1984, increased by only 3.8% in the twelve months to July 1985. Taiwanese exports to the US have risen by 1.4% over the last year, down sharply from the 29.4% and 31.0% increases recorded in 1983 and 1984. The price of commercial and office accommodation in central Taipei apparently has fallen by up to 30% over the last eighteen months. Taiwan's poor relative economic performance over the past year, coupled with an evident decline in local confidence in Taiwan's future growth prospects, has been reflected also in a dismal performance by the Taiwanese stockmarket. The local stock market index has declined by more than 30% from the highest levels recorded in May 1984. Taiwanese stock prices generally are little higher than in early 1983 whereas by comparison the world's major stockmarkets all have reached record high levels this year.

The reasons for the cyclical slowdown in real growth are straightforward. Real growth has been depressed by a cyclical decline in domestic monetary growth as a consequence mainly of sharply reduced export growth and slower growth in Taiwan's current account surplus. The contraction in monetary growth in this cycle following from changes in the external environment has been exacerbated by domestic influences. In February this year Taiwan suffered a major credit crisis which certainly has discouraged local banks from expanding aggressively the size of their balance sheets. Even though the depositors in the Tenth Credit Finance Company were protected by the Taiwanese government, associated companies of the directors of Tenth Credit have estimated net liabilities of up to NT\$40 billion.

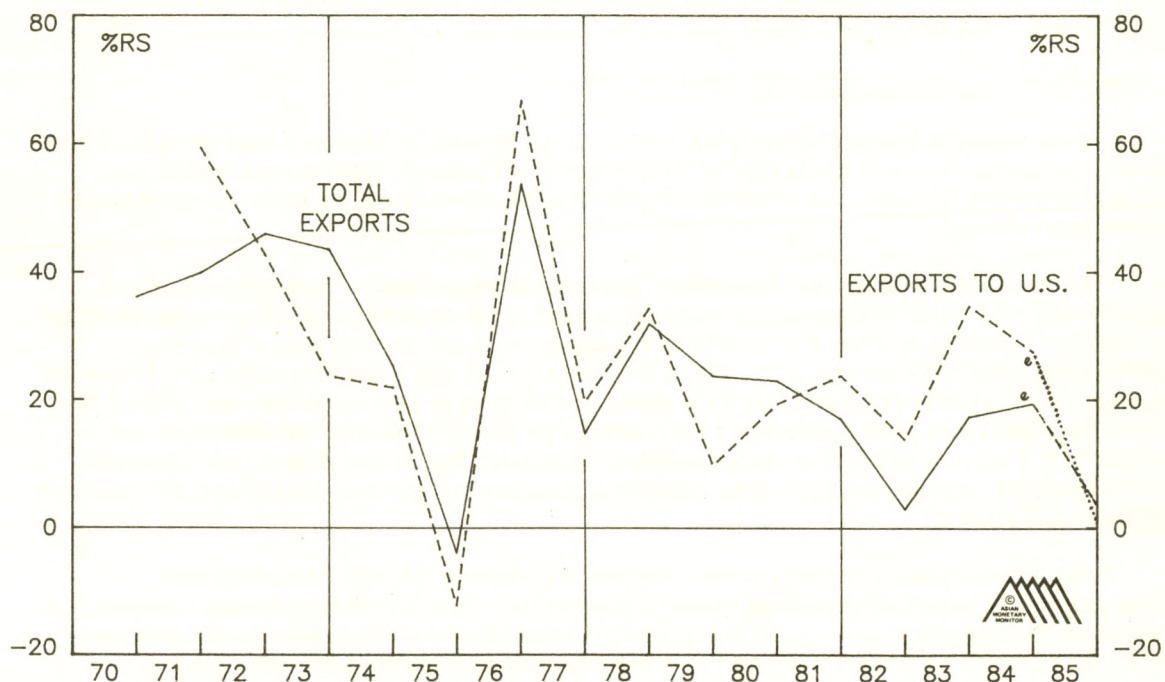
The sharp decline in export growth is associated directly with an evident reduction in the demand for Taiwan's exports from the US. During recent years exports to the US have come to dominate Taiwan's total export trade, as illustrated in Charts 2 and 3. Given the rapid growth in Taiwan's exports to the US in 1983 and 1984 and their high proportion of total exports it should come as little surprise that Taiwanese export growth slowed sharply with the US economy. In principle, slower growth in exports to the US could have been offset by increased demand from elsewhere but in practice this has not occurred. This undoubtedly reflects in part the very considerable strength (Chart 4) in the NT Dollar Real Effective Exchange Rate.

The net result of these developments, in monetary terms, is that the level of M1 (defined to include net currency issued plus net checking accounts and passbook deposits plus passbook savings deposits) rose by just 5.8% (see Chart 5) in the year to June after 14.0% in 1984 and 18.7% in 1983. Monetary growth in the year to June is close to the lowest levels recorded in the post war period. It is against this monetary background

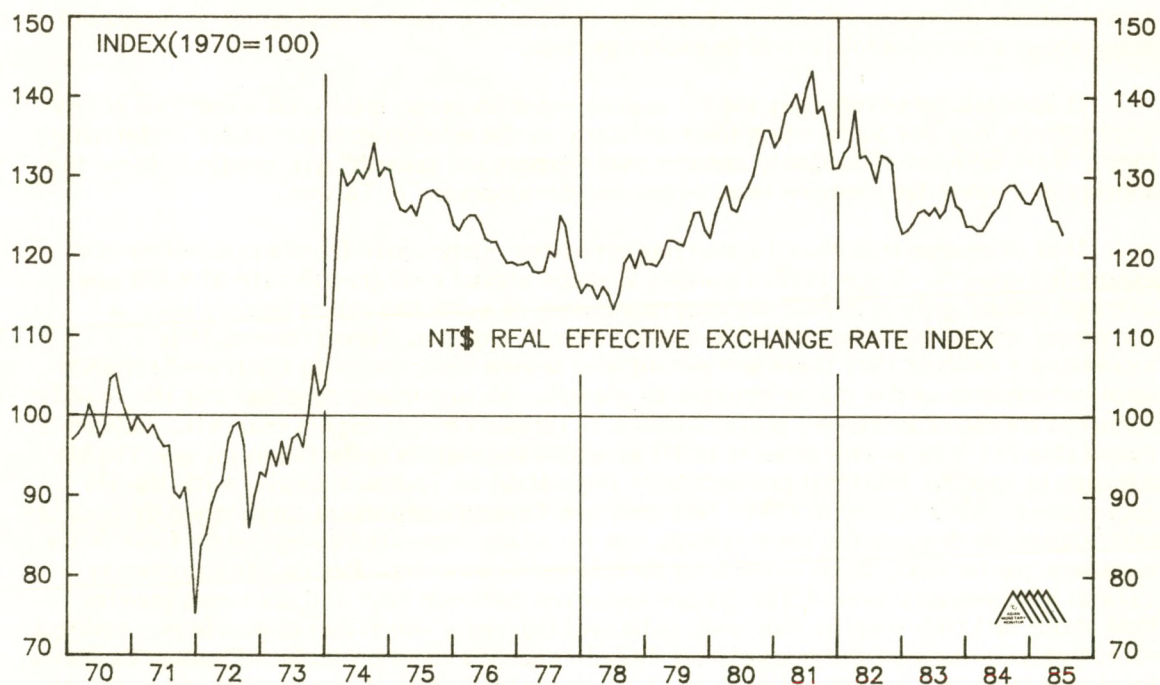
TAIWAN: CHART 2 PRINCIPAL EXPORTS MARKETS



TAIWAN: CHART 3
GROWTH IN THE VALUE OF EXPORTS



TAIWAN: CHART 4
REAL EFFECTIVE EXCHANGE RATE OF THE NEW TAIWAN DOLLAR



that the Taiwanese authorities have revised substantially their real GNP growth forecasts for 1985. Real GNP is estimated to have risen by 5.7% annualised in the first half of 1985, after 10.9% in 1984, and the Ministry of Finance expects real growth throughout 1985 to reach 5.1%.

Alternative policies to stimulate the economy

Although the factors underlying the cyclical decline in Taiwan's real growth, which are largely external and exacerbated by domestic influences, can be outlined in a straightforward manner, the alternative policies for stimulating economic recovery are more interesting.

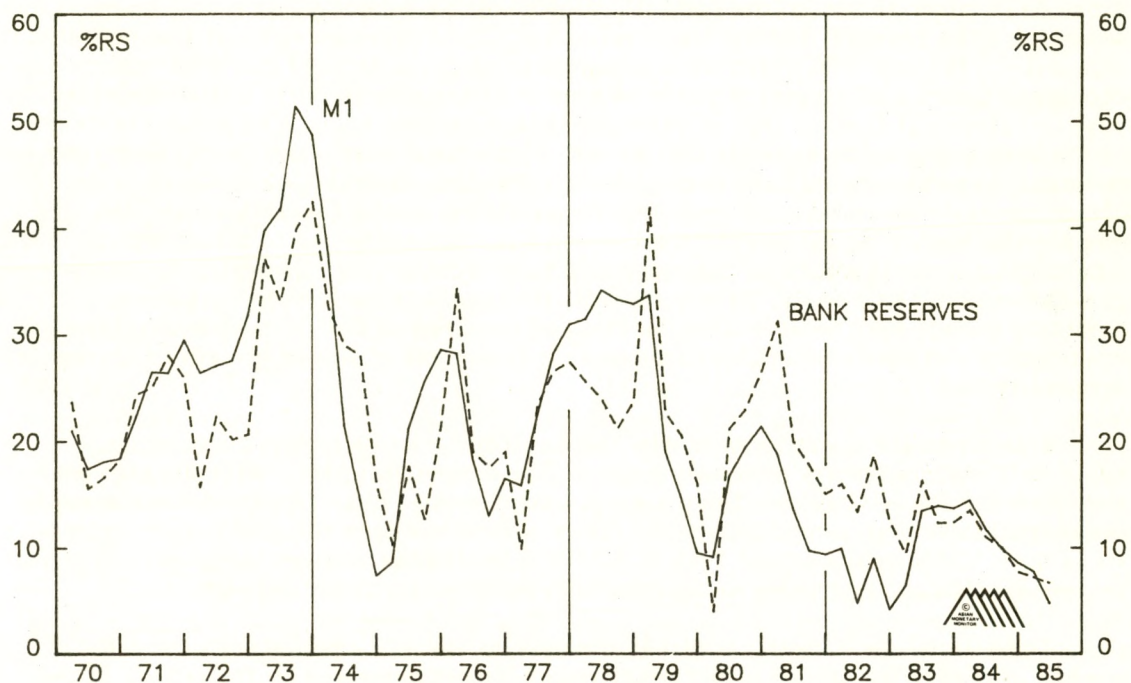
In the first instance the Taiwanese authorities may adopt a passive stance and essentially undertake no new policies to stimulate their economy. In this event, stronger growth in Taiwan's economy is conditional upon a recovery in overseas markets - particularly the US - and/or a sustained depreciation of the US dollar, and with it the NT dollar. This broadly has been the Taiwanese authorities policy response - or lack of it - over the past year. The authorities may well have underestimated the duration and impact on Taiwan's exports of slower growth in the US but in any event they have not, until recently, inaugurated any new economic policies designed to encourage independent growth in Taiwan.

An obvious policy remedy to the problems of slower growth brought about indirectly as a result of declining exports growth is to devalue or depreciate the external value of the currency. This policy adjustment may often be attractive to economies, such as Taiwan's at present, which have experienced the combination of a strong currency, low inflation and rapidly declining monetary growth. Indeed it is the policy which the Taiwanese authorities have adopted, in moderation, in recent months where they have enforced a modest depreciation of the NT dollar to US\$1 = NT\$40.8, a new low against the dollar. To judge by recent statements by local Taiwanese exporters there is considerable support for this policy, which can only act to their advantage over the shorter term. However it is doubtful whether comparatively small currency depreciations of the magnitude enforced by the Central Bank of China can independently bring about a meaningful revival in export growth.

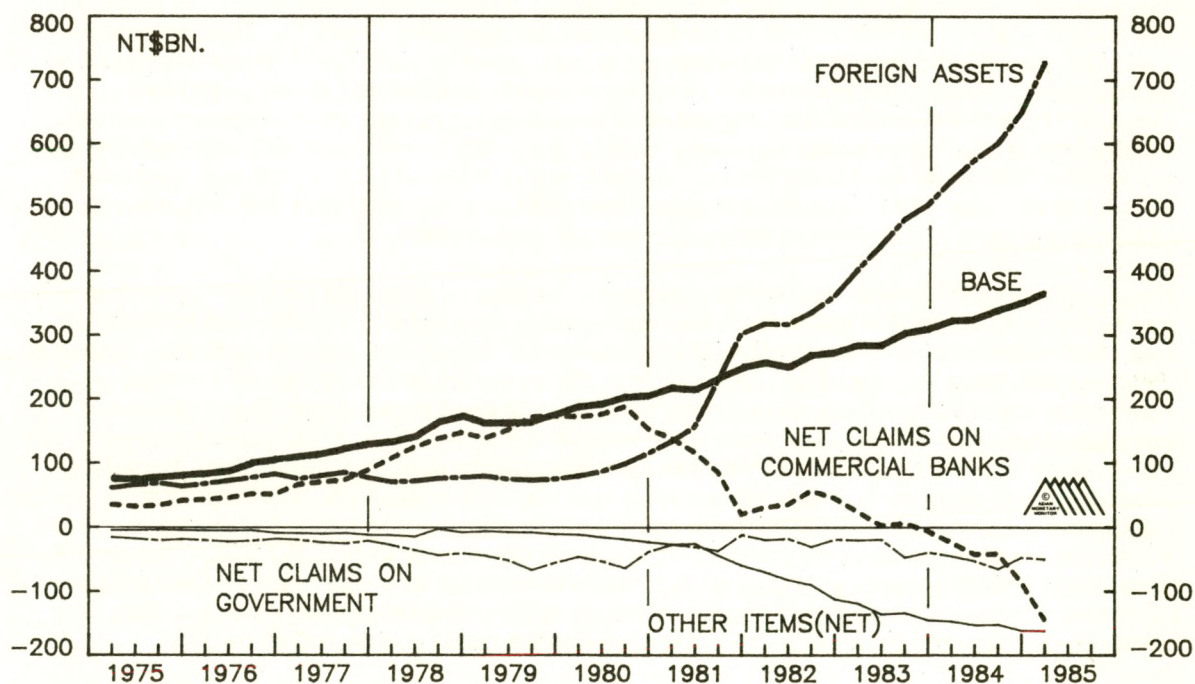
It appears, however, that the main problem with prescriptions of these two policy alternatives may not be so much their efficacy as the economic assumptions underlying them. Both policies effectively assume that "export led growth" will continue to be the appropriate mode for medium term economic development in Taiwan.

It is of course true that Taiwan has benefited enormously from a commitment to export led growth. Since 1952, Taiwan's average annual real growth rate of 8.6% and average annual growth in real per capita incomes of 6.2% has relied heavily upon a compound annual increase of 23.9% in the value of exports. Nevertheless, it is increasingly evident that there are potentially severe constraints to continued reliance upon net exports as the major impetus to growth. An important constraint is the readily apparent threat of increased protectionism in Taiwan's major export markets. Taiwan is vulnerable not only to any general tariff or quota legislation undertaken in, say, the US but also to specific bilateral protectionist legislation as Taiwan's surplus with the US approached US\$12 billion in 1984. Not only are Taiwan's exporters threatened by possible restrictions on demand for their output, but they face increased competition from other suppliers, particularly from many Less Developed Economies. Per capita incomes in Taiwan now measure some US\$2700 per annum or between four and six times greater than those of LDCs such as Thailand, India and Indonesia which can compete increasingly effectively in many of the markets for Taiwan's basic export products. Finally, Taiwan's existing export led growth policy faces a basic contradiction if, protectionism aside, its largest export market - the US - grows only comparatively slowly. The likelihood of this occurring will be enhanced if the US dollar remains strong.

TAIWAN: CHART 5
M1 AND RESERVES GROWTH



TAIWAN: CHART 6
COMPONENTS OF THE MONETARY BASE



If externally led growth in Taiwan is likely, for one reason or another, to be constrained, then it is realistic to expect the Taiwanese authorities eventually to promote stronger growth in the domestic sectors of the economy. One way in which this would easily be feasible is if the Central Bank of China reversed some of the measures it enacted in 1983 and 1984 which were designed to suppress demand in the domestic economy. Chart 6 illustrates the rate of growth of the counterparts to the monetary base in Taiwan. It is clear that in 1983 and 1984, when the balance of payments source of the base was growing strongly that growth of the total base - and hence, over time, domestic demand - should have been stronger. But the Central Bank of China acted to offset the external stimulus by reducing its net claims on the government and the commercial banks. So far in 1985 the Central Bank has continued to offset growth in the balance of payments source of the monetary base even although domestic monetary growth has declined sharply. In other words, the notable slowdown in Taiwanese monetary growth may be as much a function of the Central Bank's independent (and unnecessary and easily reversible) actions as it is a result of slower growth in aggregate demand abroad.

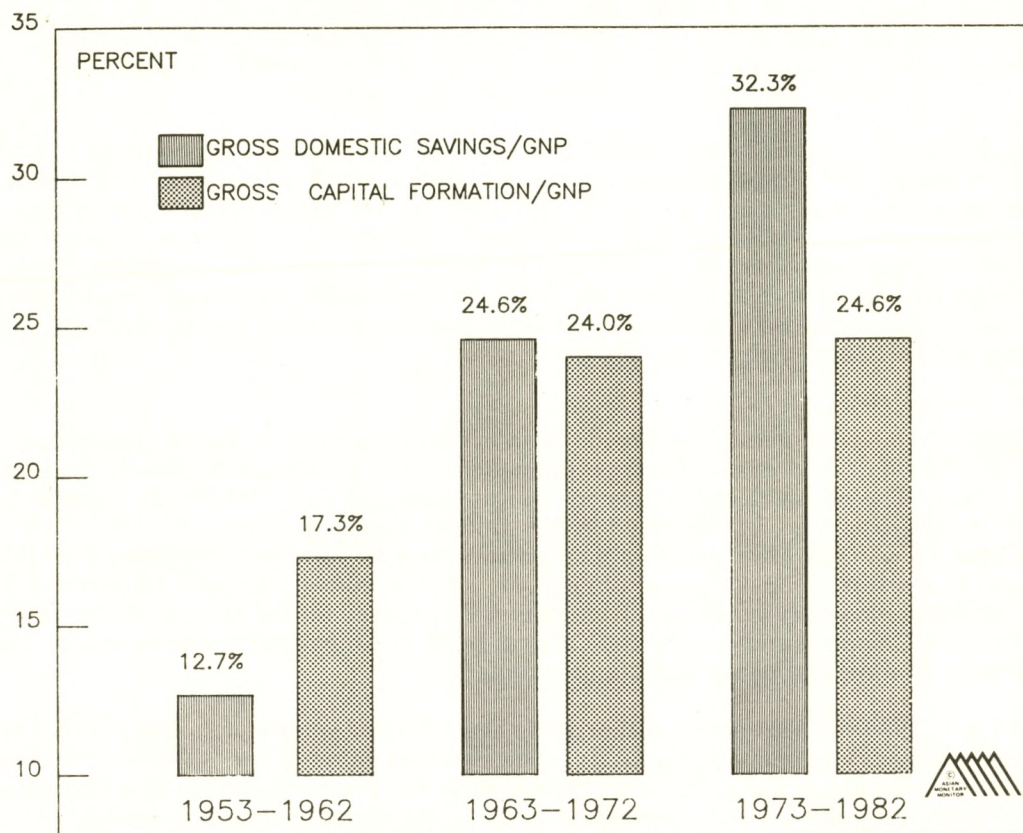
This raises the question as to why the Central Bank of China is pursuing an apparently contractionary monetary policy? The answer lies partly with the fact that the Central Bank of China's official view is that domestic monetary conditions actually are comparatively accommodative: the discount rate has been reduced in four successive steps from 7.75% at the end of 1984 to 5.75% in September and yet the growth in private sector loan demand continues to lag growth in commercial banks' deposits.

The official view clearly confuses the ease of monetary policy with the price of credit. In reality the stance of monetary policy is best measured by the growth in the quantity of money. Nevertheless the official view should also prompt the question why private sector credit demands have remained comparatively weak. If moderate growth in loan demand reflects a perceived lack of investment opportunities in the domestic economy then this may point the way to a more radical policy to encourage real growth in Taiwan.

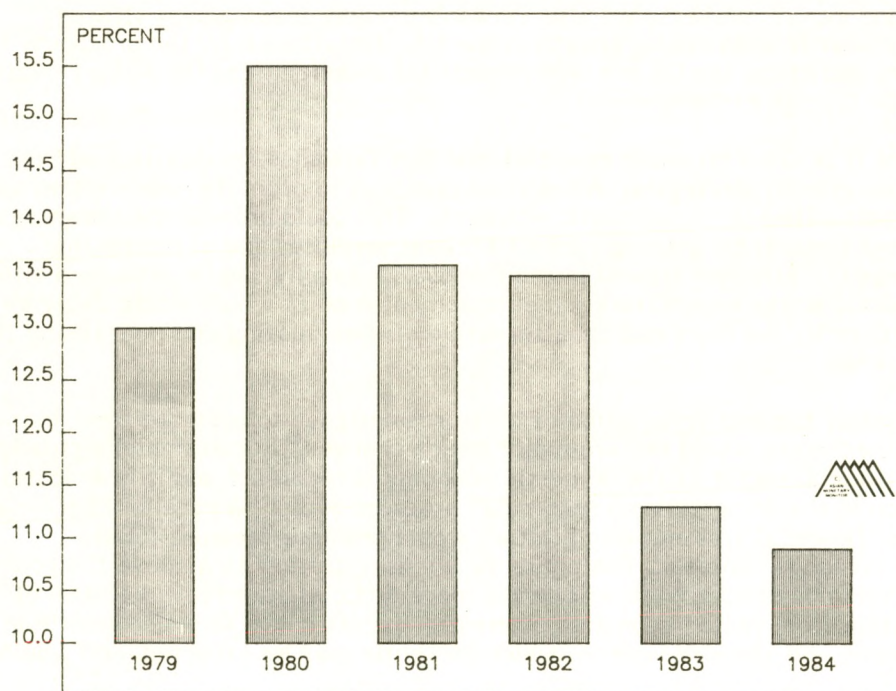
Over the past fifteen years the Taiwanese economy has gradually become a "capital surplus" economy, which is to say that Taiwan has proved more than able to finance Gross Capital Formation out of Gross Domestic Savings (see Chart 7). This "capital surplus" earned and retained by Taiwanese private corporations and institutions could have been consumed, or invested in productive assets but instead it has been used (indirectly, via the central banking authority) to acquire claims on overseas economies. Therefore it is apparent that Taiwan's "capital surplus", or retained earnings and savings, have been the basis for strong growth in the Central Bank of China's foreign exchange reserves (By May 1985 Taiwan's Foreign Reserves had risen to US\$18 bn) and are in turn the counterpart to Taiwan's massive current account surplus.

Why should Taiwan not utilise its capital surplus to generate stronger growth in the domestic sectors of the economy? This question is particularly appropriate not only because there may well be constraints to externally orientated growth, but, also because such export led growth as has taken place in the past has occurred in part because domestic consumption has, effectively, been discouraged by taxation whilst domestic savings have been encouraged and subsidised. In other words, the Taiwanese economy has undergone export led growth in part because the domestic economy has been heavily regulated and has not been permitted to operate in a free market. The resulting distortions appear sometimes to have been severe. On the one hand, for example, there is as yet no tax upon deposit interest or dividend income up to NT\$360,000. This acts to stimulate domestic savings which in the end may become a counterpart to the current account surplus. On the other hand, the consumption of foreign goods and services is heavily discouraged by an effective average import tariff estimated to be 35%.

TAIWAN: CHART 7
A CAPITAL SURPLUS ECONOMY



TAIWAN: CHART 8
PUBLIC SECTOR GROSS FIXED CAPITAL FORMATION AS A PERCENT OF GNP



Observers and investors should not underestimate the extent to which economic distortions in the domestic economy may have constrained growth there. Private consumption's share of GNP has fallen gradually but significantly over the past thirty years, from 75.5% of GDP in 1953 to a low of 49.7% in 1978 and 52.1% in 1983. This gives an indication of potential growth in consumption if some reversal in official policies towards a freer market environment were implemented.

Increased growth in private consumption need not provide the only boost to the domestic economy, for the government sector certainly has great flexibility to increase its consumption and investment. Public sector fixed capital formation as a percentage of GNP in Taiwan is comparatively low for a developing economy and in recent years it has fallen quite sharply (see Chart 8). In the light of the fact that the Taiwan government runs an effective fiscal surplus there is absolutely no reason why the recent declining trend in public fixed capital expenditure should not be reversed and the government inaugurate a significant public works programme.

FORECAST: In many respects, the slowdown in economic growth in Taiwan has been typical of a "normal" cyclical contraction in an economy with a fixed or closely managed exchange rate. The origin of the recession is in the external sector of the Taiwanese economy, where export growth declined in the wake of slower growth in the US. Over the last year Taiwan has experienced a marked slowdown in domestic monetary growth. This is partly a result of slower growth in exports and the current account surplus but tighter domestic monetary conditions have been exacerbated by the failure of the Tenth Credit Finance Company and also by the Central Bank of China continuing to reduce its net claims on commercial banks and the government.

So far in 1985 the Taiwanese authorities have followed wholly orthodox policies to encourage a recovery in economic activity. The external value of the NT dollar has been depreciated, moderately: the authorities hope clearly for the combination of a revival in economic activity in the US and a reduction in domestic import demand to lead to an improvement in the current account and a further round of export led growth.

However it appears that the constraints to further strong export-led growth are rising. Not only do protectionism and increased competition threaten to limit growth in Taiwan's existing export markets, but also Taiwan's present development strategy appears to rely heavily upon strong growth in the US. Unfortunately, the prospects for sustained strong growth in the US are only modest for as long as the US dollar remains very firm on the foreign exchanges.

Over time it is likely to prove essential that the Taiwanese authorities address alternative basic growth strategies. An obvious choice is to promote consumption and investment opportunities in the domestic economy. This could provide the advantage of halting the trend towards burgeoning current account surpluses and of promoting independent growth. Stronger growth in the domestic economy can be promoted either by increased public works expenditures, the implementation of which would likely be straightforward, or by the more radical alternative of deregulating and liberalising the domestic economy.

Unfortunately the implementation of measures designed to promote freer markets in the domestic economy would require major policy changes. For example, virtually the whole of the financial sector of the domestic economy is regulated and it is doubtful how far deregulation in the domestic real sector can progress without a parallel liberalisation of the domestic financial system, which in turn would promote pressure for the withdrawal of exchange controls. The policy revisions necessary to achieve the goal of sustained stronger domestic growth will be the more difficult to achieve because of likely competition from vested economic interests. In particular, stronger growth in the domestic economy will absorb resources which currently may be exported, and would

promote pressure for an appreciation rather than a depreciation of the NT dollar.

It must be stressed that at present there is little tangible evidence that the Taiwanese authorities are seriously concerned to encourage stronger growth in the domestic economy. This should be of medium term concern to potential investors in the Taiwanese economy. For in the absence of stronger growth in domestic sectors of the economy or an unexpected improvement in the outlook for world trade, real growth in Taiwan is very unlikely to repeat the record of the last fifteen years.

APPENDIX

The Derivation of IMF Format Central Bank and Deposit Money Banks' Balance Sheets from Central Bank of China Statistics

IMF Format	April 1985 (Billions of NT Dollars: End Period)	CBC Statistics (Financial Statistics Monthly
<u>CENTRAL BANK</u>		
(Line 11) Foreign Assets	738.90:	Foreign Assets of CBC (p. 9)
(Line 12a) Claims on Government	4.24:	CBC Claims on Government (p.9) consisting of: Loans + Discounts (p. 9) plus: Treasury Advances (p. 9) plus: Govt. Securities (p. 9)
(Line 12e) Claims on Commercial Banks	82.23	CBC Claims on Monetary Instit. (p. 10) consisting of: Claims on domestic banks (p. 10) plus: Claims on local branches of foreign banks (p. 10) plus: Other (p. 10)
(Line 14) Reserve Money	356.77:	Reserve Money, consisting of: Currency issued (p. 11) minus CBC Vault Cash (p. 10) minus DMB Vault Cash (p. 14) equals: Currency held by non-bank public, plus:
(Line 14a) of which currency outside banks	163.35:	Banks' Reserves consisting of: DMB Vault Cash (p. 14) plus: Reserves against deposits (p. 12) plus: Other deposits of Monetary Instit. (p. 12) plus: Deposits Replaced from Financial Instit. (p. 12) minus: Time & Savings Deposits (p. 12)
(Line 15) Time & Savings Deposits	224.12:	Time & Savings Deposits (p. 12)
(Line 16d) Government Deposits	62.98:	Government Deposits consisting of: General Treasury Receipts Deposits (p. 11) plus: Ordinary Treasury Deposits (p. 11) plus: Foreign Currency Deposits (p. 12) plus:
(Line 16e) Counterpart Funds	4.50:	Sino American Development Fund Deposits (p. 12)
(Line 17r) Other Items (net)	177.00:	Other Items (net) consisting of: Other Items (p. 12) plus: Deposits of other Financial Instit. (p. 12) minus: Govt. Enterprise Securities (p. 10) minus: Private Enterprise Securities (p. 10) minus: Claims on other Financial Instit. (p. 10)

DEPOSIT MONEY BANKS

April 1985
(Billions of NT Dollars: End Period)

CBC Statistics
(Financial Statistics Monthly)

(Line 20) Reserves

193.40: 193.78
158.50
35.04

Bank Reserves consisting of:
DMB Claims on CBC (p. 14) plus:
Vault Cash (p. 14)

(Line 21) Foreign Assets

280.35: 276.54

Foreign Assets (p. 13)

(Line 22a) Claims on Govt.

89.12: 89.13
41.52
47.61

DMB Claims on Govt. consisting of:
Loans to Govt. Agencies (p. 13) plus:
DMB Holdings of Govt. Securities (p. 14)

(Line 22b) Claims on Official Entities

266.97: 266.97
231.62
35.33

DMB Claims on Official Entities consisting of:
Loans to Govt. Enterprises (p. 13) plus:
DMB Holdings of Govt. Enterprise Securities (p. 14)

(Line 22d) Claims on Private Sector

1551.67: 1552.77
1402.26
150.51

DMB Claims on Private Sector consisting of:
Loans to Private Sector (p. 13) plus:
DMB Holding of Private Sector Securities (p. 14)

(Line 24) Demand Deposits

485.59: 485.48
111.45
374.03

Demand Deposits Adjusted consisting of:
Checking Accounts (p. 15) plus:
Passbook Deposits (p. 15)

(Line 25) Time and Foreign Currency
Deposits

1378.14 1377.19
268.26
18.29

Time & Foreign Currency Deposits consisting of:
Time Deposits (p. 15) plus:
Certificates of Deposits (p. 15) plus:
Fixed Savings Deposits (p. 15) plus:

828.36 26.51
209.75 26.02

Foreign Currency Deposits (p. 16) plus:
Deposit Replaced from Postal Savings System (p. 16) plus:
Deposits of Other Financial Institution (p. 16)

(Line 26c) Foreign Liabilities

140.17: 140.17

Foreign Liabilities (p. 15)

(Line 26d) Government Deposits

135.69: 136.34
34.83
97.41
4.10

Govt. Deposits consisting of:
General Treasury Receipts Deposits (p. 16) plus:
Ordinary Treasury Deposits (p. 16) plus:
Foreign Currency Deposits (p. 16)

(Line 26g) Credits from Central Bank

82.23: 82.23

Deposits of CBC (p. 16)

(Line 27r) Other Items

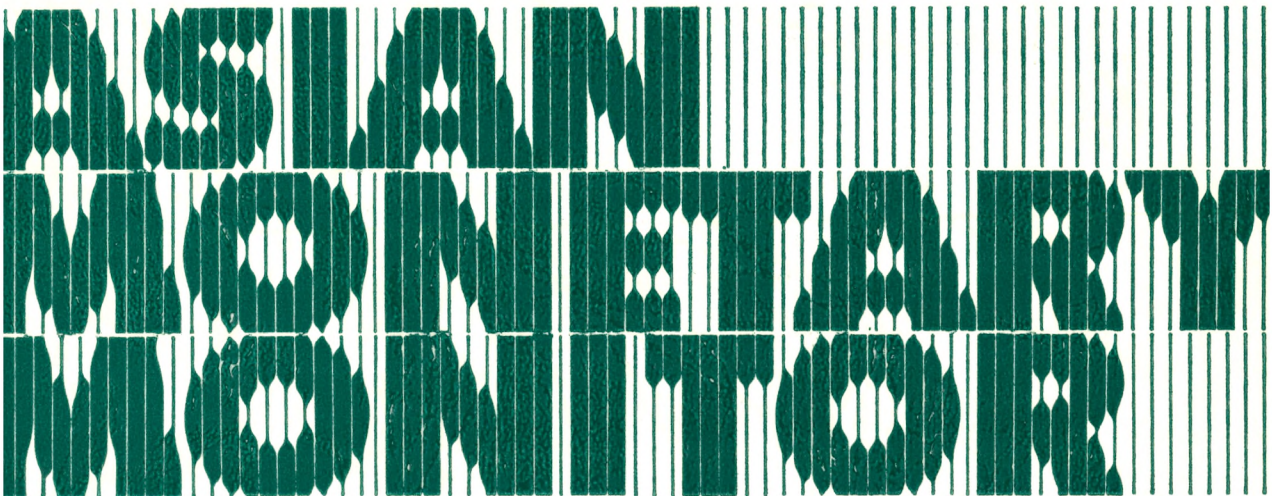
159.69: 157.56
163.10
21.75
12.34
7.31
22.19

Other Items consisting of:
Other Items (net) (p. 16) plus:
Presettlement requirement for import (p. 16) plus:
"Other" Borrowings (p. 16) plus:
Bank Debentures issued (p. 16) minus:
DMB Claims on Other Financial Instit. (p. 16) minus:



ASIAN MONETARY MONITOR

is published by
Asian Monetary Monitor Ltd.,
P.O. Box 12964, G.P.O.,
Hong Kong.



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Asian Monetary Monitor is a bimonthly publication specialising in the analysis of economies along the Asian Pacific Rim. Sold by subscription only, price US\$200 p.a. inclusive of air mail delivery to any part of the world. Correspondence and subscriptions should be addressed to The Editor, Asian Monetary Monitor Ltd., P. O. Box 12964, G.P.O., Hong Kong.

EDITOR:

John G. Greenwood

M.A. (Hons) Econ. Edinburgh
Research Economist, University of Tokyo
Economist at G.T. Management (Asia) Ltd.

**CONTRIBUTING
EDITORS:**

Hugh P. Sloane

B.A. Econ. Bristol
M. Phil. Econ. Oxford
Economist at G.T. Management (Asia) Ltd.

Tim J. Lee

B.A. Econ. Cambridge
Economist at G.T. Management (Asia) Ltd.

**CHARTS AND
STATISTICS:**

S.Y. Chan

Michael Wong

ADMINISTRATION:

Isabella Ling

Asian Monetary Monitor is published in

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ASIAN MONETARY MONITOR

Sept. - Oct. 1985

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KEY TO SYMBOLS USED IN THE CHARTS

%RP - Percentage Rate of change over Preceding period.

%RS - Percentage Rate of change over Same period of preceding year.

SA - Seasonally Adjusted.

SAAR - Seasonally Adjusted at Annualised Rate.

INDIA

TAX REFORM AND LIBERALISATION UNDER THE NEW ECONOMIC POLICY

by M.P. Bhatt, Gujarat University

The maiden budget presented to Lok Sabha (Parliament) on 15th March, 1985 by the Government of Mr. Rajiv Gandhi has generated widespread euphoria in the country. This is mainly because for the first time since Independence in 1947 a totally fresh approach to the entire field of taxation - direct as well as indirect - has been introduced. In addition, the new economic policy reflected in the budget contains a policy package which aims at opening up the domestic economy, through liberalisation, more competition, easing the restraints on free trade, and by encouraging export promotion (as opposed to import substitution). By encouraging entrepreneurial initiative and reducing the stranglehold of bureaucrats and politicians on the economy, the new policy gives vent to the creative forces of the society. This article outlines the background to India's economic stagnation, and the fiscal changes introduced in the New Economic Policy in India.

1. Background

For more than three decades India has followed an inward-looking policy of market intervention in the form of Central Planning, which has resulted in a maze of unnecessary and sometimes contradictory controls and regulations.

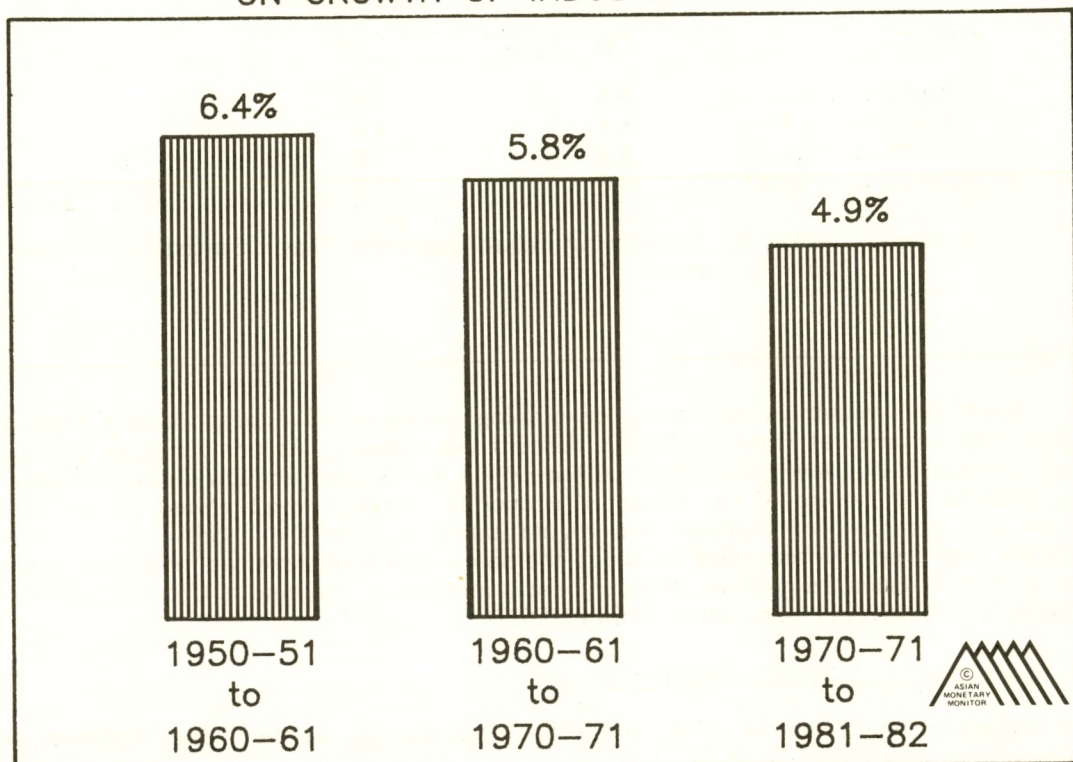
As a consequence, in spite of enormous developmental potential, the performance of the Indian economy as compared to many Asian Countries has remained poor (see Table 1).

TABLE 1
Average Annual Growth Rate (Percent)

<u>Country</u>	<u>GNP per Capita 1960-82</u>	<u>GDP 1970-82</u>
India	1.3	3.6
Sri-Lanka	2.6	4.5
Pakistan	2.8	5.0
Korea (Rep. of)	4.3	8.6
Malaysia	4.3	7.7
Hong Kong	7.0	9.9
Singapore	7.4	8.5
Thailand	4.5	7.1
Indonesia	4.2	7.7
Philippines	2.8	6.0

Source: "World Development Report 1984"

INDIA : CHART 1 THE IMPACT OF CENTRAL PLANNING ON GROWTH OF INDUSTRIAL SECTOR



Average annual rate of increase in the index of value added from the industrial sector.

INDIA : CHART 2 AVERAGE ANNUAL GROWTH RATE (%) OF PER CAPITA GNP UNDER CENTRAL PLANNING

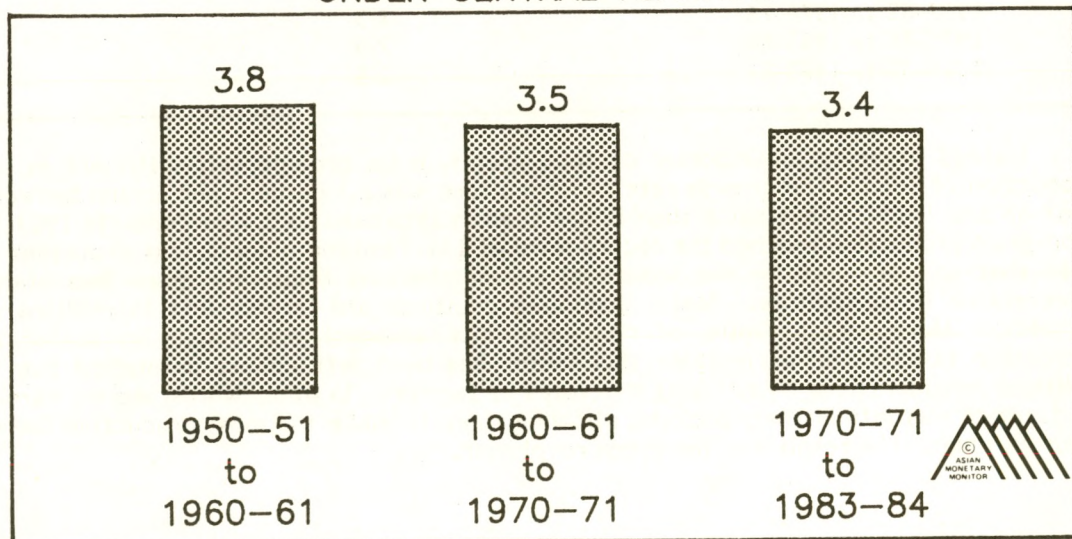


TABLE 2

Average Annual Growth Rate (Percent) of Indian Economy

<u>Period</u>	<u>Per Capita*</u>	<u>GNP</u>
1950-51 to 1960-61	3.8	1.8
1960-61 to 1970-71	3.5	1.2
1970-71 to 1980-81	3.3	1.0
1950-51 to 1984-85	3.6	1.5

Source: Centre for Monitoring Indian Economy: "Basic Statistics Relating to Indian Economy" - Bombay

* See Chart 1.

Developed countries and many developing countries have been raising their per capita real incomes at rates of 3 to 8 percent per annum. As compared to this India could achieve only a low growth rate of barely 1.5 percent per annum. In large measure, this reflects the failure of the accepted economic strategy which relied on the public sector and a regime of controls and regulation to deliver the goods. In the 1950's Thailand and South Korea were at about the same economic level as India, but today, due to market-oriented policies, the per capita income of Thailand is US\$800, and South Korea's is US\$1900 as compared to India's US\$270.

1.1. Agriculture - A Steady Contributor

After independence in 1947, the real break-through in the Indian economy was made in agriculture (see Table 3).

TABLE 3

Agricultural Production

<u>Period</u>	<u>Average Annual Rate of Increase (%)</u>
1949-50 to 1964-65	3.1
1967-68 to 1975-76	2.3
1975-76 to 1983-84	2.5
1949-50 to 1983-84	2.6

Instead of being an importer of food grains, India became self-sufficient in the production of food. The growth rate in agriculture was 2.3 percent per annum between 1967-68 and 1975-76, but since then it has slightly improved to 2.5 percent. In 1983-84 food-grain production reached the record level of 151.5 million tonnes. It is important to note that as compared to the industrial sector there is relatively much less state-intervention in agriculture. Major economic decisions are largely left to millions of farmers. Moreover, in spite of near-unanimity amongst economists in favour of increasing taxation on agriculture this sector has been left almost untouched due to political considerations - i.e. losing the votes of farmers. In other words, money earned by farmers was left in their pockets, allowing them to make the most productive use of their earnings. The result was the green revolution.

1.2. Industry - Slow Strangulation

As against this, over the years, an increasing maze of controls at all levels has placed increasingly difficult hurdles in the path of industrial production. As a consequence there has been a steady deceleration in the growth rate of industrial production, decade after decade: from 6.4 percent during the fifties to 5.8 percent during sixties and 5.0 percent during seventies. This deceleration in the growth of the industrial sector is presented in Chart 2. Further, between 1970 and 1982 the production of manufacturing industries increased by 84 percent giving an average growth rate of 4.5 percent per annum. This was lower than the rate of growth of new industrial capacity which increased at the rate of 6.1 percent, and the result was under-utilisation. Overall capacity utilisation was 85 percent in 1970 but declined to 76 percent in 1980.

Consequently India's performance in the export of manufactured goods has remained poor, and it has been overtaken in this field by a host of smaller economies. Hong Kong alone, a tiny island territory, exports about three times as many manufactured products as India. Large areas of manufacturing industry in India are technologically obsolete and most of them are very uncompetitive in the world market because of the inward looking policy of import restriction and forced import substitution, which insulates Indian industries from international competition.

Along with direct and physical controls the major policy instrument undermining the operation of the market mechanism was the "command" of the economy through state undertakings, which in recent years have absorbed half to two-thirds of investment resources. These public sector undertakings are "white elephants" incurring huge losses which are offset by government subsidy, or in some cases by higher administered prices of their loss-making products.

2. The New Economic Policy

The new economic policy in India should be judged from the perspective outlined above. The roots of the poor performance of the Indian economy, and the origins of the all-pervading corruption and illicit income (known as black money or the parallel economy) are to be found in the labyrinthine controls and regulations. Hence it was expected that the newly elected Government would move away from the policy of over-government and permit greater play of market forces. Fortunately with the presentation of the Central Budget in March 1985 and the announcements of recent policy measures India seems to have moved towards a policy of liberalisation.

The 1985 budget proposals introduce the most comprehensive tax-reform in years through the reduction in corporate and individual taxation, a simplification of tax schedules, and a reduction in administrative costs.

In the field of personal taxation the budget provides a number of reliefs:

2.1. Income Taxation

- * The exemption limit of personal income tax is raised from Rs. 15,000 to Rs. 18,000.
- * Reduction of tax at all levels of personal income.
- * Reduction of the maximum marginal rate from 62 percent to 50 percent.
- * Reduction of the number of tax rates brackets from 8 to 4.
- * Abolition of the 12.5 percent surcharge on income tax.

- * Abolition of Compulsory Deposit Scheme. Under the Compulsory Deposit Scheme (CDS) all income-tax payers were compelled to deposit with the Government (via nationalised banks) along with income-tax a certain percentage of their income varying from 4.5% at low-income levels to 18% on income above Rs. 70,000 for a period of 5 years. These deposits were to be returned in installments with 11% interest. CDS is now abolished.

The most significant feature of the tax policy is the drastic reduction in the marginal rate of income tax to 50%, down from around 97.75% between 1971 and 1974 and 55% at present (1984-85). The tax reduction is likely to result in a decline in tax revenue of Rs. 4 billion. However, it is expected that of this reduction Rs. 2 billion will be recouped on account of better tax compliance on the part of taxpayers.

TABLE 4
PERSONAL INCOME TAX RATES*

<u>Income Slabs</u>	<u>Existing rates</u>	<u>Proposed Income Slabs</u>	<u>Proposed rates</u>
Upto Rs. 15,000	Nil	Upto Rs. 18,000	Nil
Rs. 15,001-20,000	20%	Rs. 18,001-25,000	25%
Rs. 20,001-25,000	25%	Rs. 25,001-50,000	30%
Rs. 25,001-30,000	30%	Rs. 50,001-100,000	40%
Rs. 30,001-40,000	35%	Over Rs. 100,000	50%
Rs. 40,001-50,000	40%		
Rs. 50,001-70,000	45%		
Rs. 70,001-100,000	50%		
Over Rs. 100,000	55%		

* Applicable to individuals, Hindu undivided families, unregistered firms etc.

2.2. Wealth Tax and Estate Duty:

- * The exemption limit of Wealth Tax has been raised from Rs. 1.5 lakh (Rs. 150,000) to Rs. 2.5 lakh (Rs. 250,000).
- * Reduction of Wealth Tax at all levels (see Table 5 below), and Estate Duty abolished.

TABLE 5
WEALTH TAX SCHEDULE

<u>Existing rates</u>		<u>Proposed rates</u>	
Upto Rs. 250,000	1 1/2%	Upto Rs. 250,000	Nil
Rs. 250,000-500,000	1%	Rs. 250,000-1,000,000	1 1/2%
Rs. 500,001-1,000,000	2%	Rs. 1,000,001-2,000,000	1%
Rs. 1,000,001-1,500,000	3%	Over Rs. 2,000,000	2%
Over Rs. 1,500,000	5%		

2.3. Benefits to Non-Resident Indians (NRIs)

- * The abolition of Estate Duty confers major benefits on NRIs along with other Indians.
- * Reduction in flat-rate optional taxation on income from specified foreign exchange assets from 25% to 20%.
Under the existing provisions of the Income Tax Act "Investment income" and income by way of long term capital gains accruing to NRIs in India is taxed at a rate of 20%. The income tax so calculated is increased by a surcharge at the rate of 12.5% of such income tax. In the case of Resident Indians and NRI, the surcharge on investment income is also abolished. This will increase the net after tax return on investments by non-residents in India. Thus the prospects for non-resident investment in debentures, company deposits, shares, etc. have become brighter. Current pre-tax returns of 13-15% available on non-resident investment compare favourably with the tax free returns obtainable in most foreign countries and tax havens.

2.4. Corporate Taxation

The corporate sector is the major contributor of direct tax revenue as it contributes over 55% of the total direct tax revenues (see Table 6). From the financial year 1985-86 the basic rate of income-tax applicable to companies (i.e. corporation tax) is reduced by 5 percentage points. In the case of certain closely held companies the rate is reduced by 10 percentage points - from 65% to 55% - and for the remaining widely-held companies the rate will be 52.5%.

In India tax proposals have traditionally been kept entirely confidential until the budget is presented. One of the more serious shortcomings of the Indian Tax System, therefore, was its instability, leading to uncertainty among the business community. This tradition has now been broken at least in respect of corporate taxation for the Finance Minister has announced a programme of changes for the next three years and invited a public debate on it. He has made assurances that there would be a further 5% reduction in corporate taxation next year, and in the third year the surcharge on income-tax payable by companies along with surtax will be abolished.

The drastic and erratic changes made in annual budgets used to make decision-taking at firm level extremely difficult. The Government has declared that later this year a three-year fiscal policy designed to provide a stable environment for decision-making will be announced. It is true that as compared with the corporate tax rate in Argentina, Brazil, Pakistan, Hong Kong, the Philippines, Taiwan and Thailand, where corporate tax rates are less than 40 percent, the rate of corporate tax still remains high but further reductions in the next two years would begin to make the Indian corporate tax rate comparable to these countries.

2.5. Indirect Taxation

In the field of indirect taxes - from which Government obtains more than 78% of its tax revenue - there has been a steep increase in the customs duty on crude petroleum. Excise duties have also been increased for a few other items. However, advanced types of computers are totally exempted from customs duties, and in the case of important computer components, customs duties have been lowered.

TABLE 6

REVENUE AND EXPENDITURE OF INDIAN GOVERNMENT

	A. RECEIPTS									
	Rs. Billion					% Share of total				
	1950-51	1960-61	1970-71	1980-81	1985-86 (est)	1950-51	1960-61	1970-71	1980-81	1985-86 (est)
Tax Revenue (a to e)	4.1	9.0	32.1	131.8	259.4	71.3	44.3	49.9	47.1	44.7
a. Corporation Tax	0.4	1.1	3.7	13.1	30.6	6.9	5.4	5.8	4.7	5.3
b. Taxes on Income other than Corporation Tax	1.3	1.7	4.7	15.1	17.7	23.6	8.4	7.4	5.4	3.0
c. Customs	1.6	1.7	5.2	34.1	81.7	27.6	8.4	8.2	12.2	14.1
d. Union Excise Duties	0.7	4.2	17.6	65.0	122.5	12.0	20.6	27.4	23.2	21.1
e. Others	0.1	0.3	0.8	4.5	7.0	1.2	1.5	1.1	1.6	1.2
Non-tax Revenue	0.8	2.7	8.9	34.4	78.5	14.4	13.6	13.8	12.3	13.5
Market Loans (net)	-0.1	0.7	1.4	27.2	51.0	-1.9	3.6	2.2	9.7	8.8
External Loans (net)	0.0	2.2	3.3	13.3	21.4	0.5	10.7	5.2	4.8	3.7
Recovery of Loans and Advances	0.1	1.3	9.3	24.6	40.0	1.8	6.2	14.4	8.8	6.9
Other Receipts	0.8	3.2	6.5	22.6	96.2	13.2	15.8	10.1	8.1	16.6
Uncovered Gap	0.0	1.2	2.9	25.8	33.5	0.7	5.8	4.4	9.2	5.8
Total (including effects of proposed new taxes/reliefs)	5.7	20.2	64.3	279.7	580.1	100.0	100.0	100.0	100.0	100.0

	B. EXPENDITURE									
	Rs. Billion					% Share of total				
	1950-51	1960-61	1970-71	1980-81	1985-86 (est)	1950-51	1960-61	1970-71	1980-81	1985-86 (est)
Used by Central Govt.	4.4	12.5	34.7	179.5	370.1	76.6	62.0	54.0	64.2	63.8
a. General Services	na	na	11.8	52.9	115.8	na	na	18.4	18.9	20.0
b. Defence Services	1.7	2.8	12.0	38.7	76.9	29.6	13.9	18.7	13.8	13.2
c. Social Community Services (including loans)	na	na	2.8	10.5	28.9	na	na	3.5	3.7	5.0
d. Economic Services (including loans)	na	na	8.6	77.5	148.6	na	na	13.4	27.8	25.6
Transferred or Lent to States and Union Territories	1.3	6.1	24.1	97.3	206.1	22.2	30.0	37.4	34.8	35.5
Transferred and Lent to Others	0.1	1.6	5.5	2.8	3.8	1.2	8.0	8.5	1.0	0.7
Total	5.7	20.2	64.3	279.7	580.1	100.0	100.0	100.0	100.0	100.0

Note: In this table revenue and capital accounts are combined to provide a more meaningful way of looking at these data.

2.6. Deregulation of Industry

To accelerate growth and encourage greater productivity the Government has (1) delicensed about 25 industries; (2) increased the limit under the Monopolies and Restrictive Trade Practice (MRTP) Act from Rs. 20 crores (Rs. 0.2 billion) to Rs. 100 crores (Rs. 1 billion); (3) offered concessions to the small scale sector and subsidiary companies in respect of the ceiling on investment in plant and machinery.

Under the Industries (Development and Regulation) Act 1951 it is imperative to obtain a licence for the following actions: (i) establishing a new undertaking, (ii) taking up the manufacture of a new article in an existing industrial undertaking, (iii) substantially expanding the capacity of an industrial undertaking in an existing line of manufacture, (iv) and changing the location of an existing industrial undertaking.

The industrial licensing policy has naturally been the subject of much debate and criticism. The working of industrial licensing has been investigated by several official committees - all of which came to the conclusion that it has increased concentration and monopoly by providing a disproportionate share of the newly licensed capacity to large business houses, and by curbing potential entry into the industry. The elimination of industrial licensing requirements will have its greatest impact on industries that were in recent years subjected to special regulations and capacity constraints. For example, with the liberalisation of the licensing policy the manufacture of any type of motorised two wheelers is now permitted without prior official permission. As a consequence a new crop of fuel-efficient vehicles - many of them made in collaboration with top Japanese manufacturers - is reaching the market and India is experiencing "the two wheelers revolution". It is estimated that about 110,000 additional two wheelers will be on Indian roads by the end of 1986. Similarly the manufacturers of four wheeled vehicles are now free to manufacture passenger cars and commercial vehicles. Thus all manufacturers of cars and jeeps will now be able to take up the manufacture of trucks and buses or jeeps under this liberalised policy.

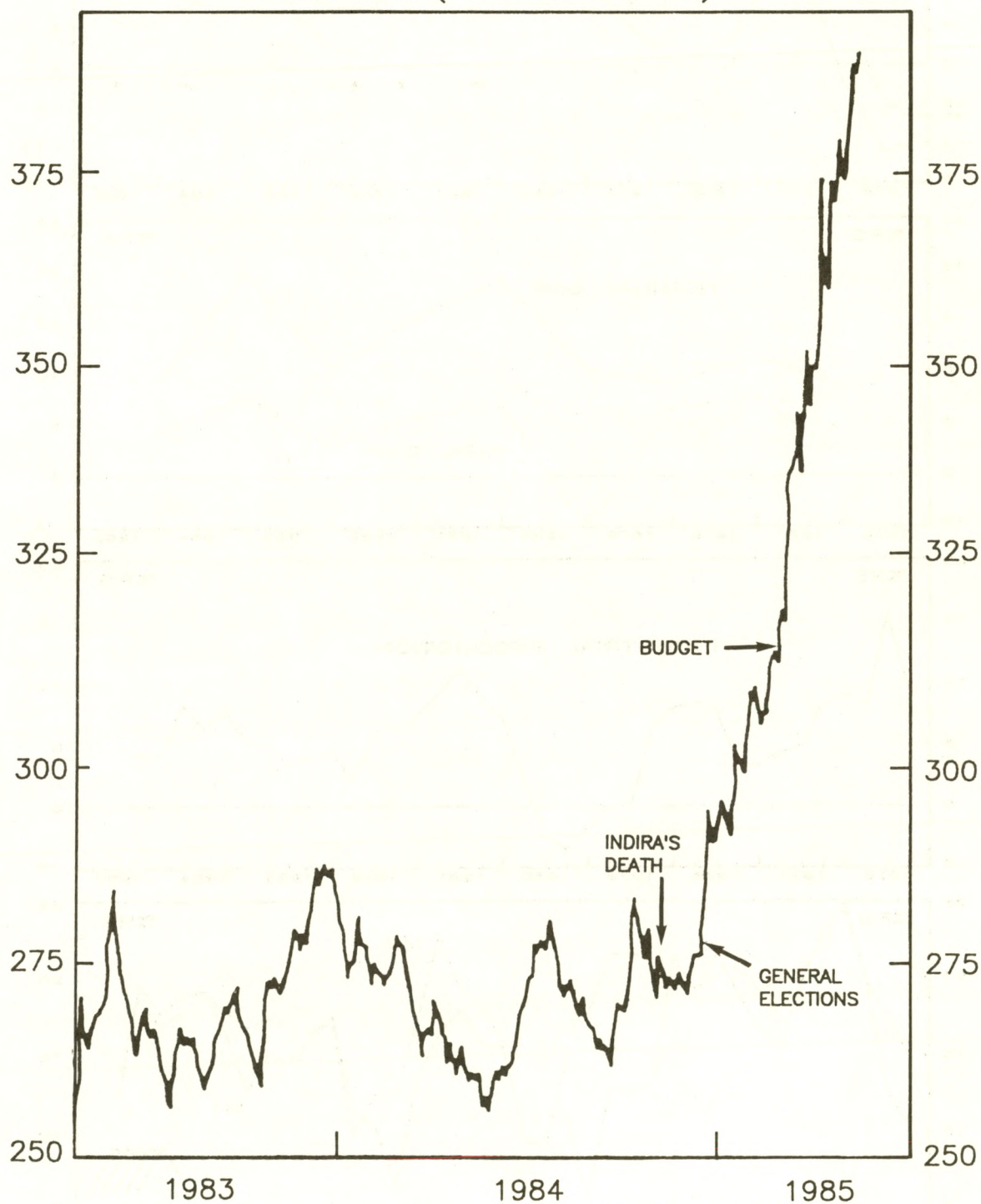
The new policy announced by the Union Government is also likely to give new life to the Indian textile industry. All curbs on expansion and reduction of capacity in the organised mill sector have been removed with a view to improving performance, and enabling producers to realise economies of scale.

Under the MRTP Act all non-government undertakings having assets of the value of not less than Rs. 2 million either by itself or together with its affiliates are required to be registered with the Central Government. These undertakings have to obtain prior approval of the Central Government for substantial expansion, for setting up of a new undertakings, for mergers, amalgamations, or takeovers of other undertakings. Earlier in 1985 MRTP constraints were removed from nine industries including energy exploration, light commercial vehicles, and electronic components. These liberalisation measures along with the raising of the MRTP asset ceiling limit from Rs. 2 million to Rs. 10 million are likely to generate greater competition and lead to increased efficiency.

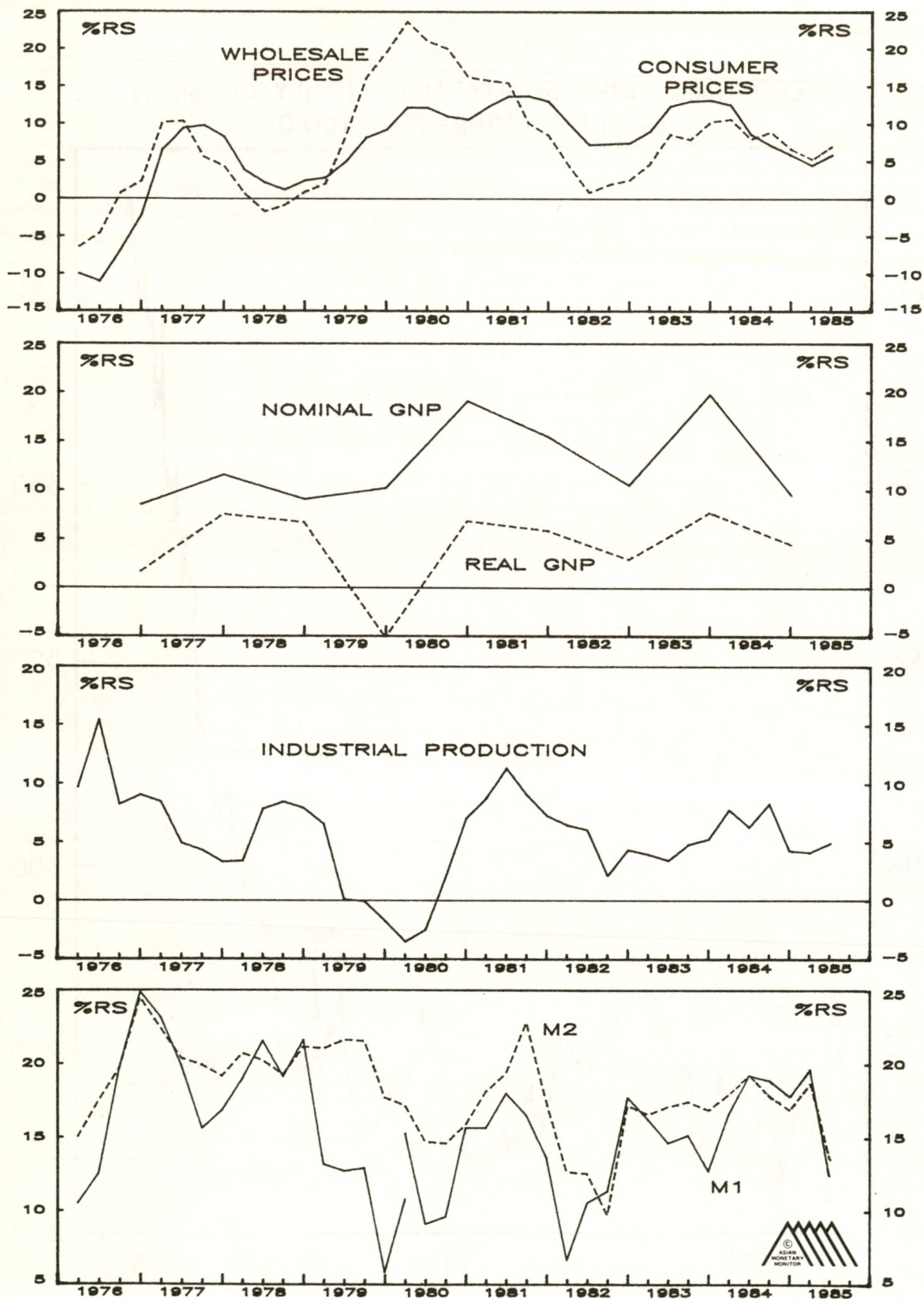
2.7. Export Duties and Tariffs

The 1985-86 budget has abolished most export duties with a view to stimulating exports, and tariff concessions were announced on key machinery components and inputs for several export oriented industries. Further, special tax assistance provisions were introduced for the tea industry and other specified industries, linked to approved modernisation schemes. Thus, for the first time the budget is being treated as a tool of economic policy, rather than as an instrument for raising tax revenue. The Economic Survey presented to Parliament before the budget pointed out that "direct taxation cannot be relied upon to generate large revenues in a developing country without adversely affecting the incentive to save and invest", and "the scope for raising additional resources through indirect taxes beyond the normal growth of revenue associated with production is limited".

INDIA : CHART 3
 ECONOMIC TIMES EQUITY INDEX (DAILY CLOSING)
 ALL INDIA (1969-70 = 100.0)



INDIA: CHART 4 MONEY, OUTPUT AND PRICES



2.8. The Import-Export Policy

The import-export policy announced on April 12, 1985 is yet another step forward towards liberalisation which will accelerate technological upgrading and modernisation, and will boost external trade. In the past the Government used to announce every year its import-export policy - which used to create a rush for imported equipment or components or raw materials on the liberalisation list for fear that these items might not be available in the next year's announcement. The new policy framework of the import-export policy, unlike that in the past, will be maintained for three years. This will discourage overstocking of imported inputs and promote more rational export-import operations. The inclusion of 201 items of industrial machinery along with 467 other items in the Open General Licence (OGL) will do away with the need to obtain certificates of past consumption and with the need to apply for an import licence for most of the items. To aid modernisation and technological improvement, industrial undertakings are now allowed to import technical sample drawings and prototypes without restriction.

3. Conclusion

The above outline of the new economic policy measures - recently announced over the past several months - clearly indicates the new thrust towards liberalisation of the economy which aims at accelerating the pace of industrial development and export expansion. The success of outward-looking liberal policies followed by countries such as Taiwan, Korea and Hong Kong may be considered irrelevant for a large-sized country like India. But one can perhaps refer to Japan, a large country which performed miracles in transforming its economy over a period of two decades (1945 to 1965). Many Indians have apprehensions about the outcome of liberalisation, but even the Japanese initially had the same doubts and apprehensions about the outcome of economic growth pursued in Japan. In retrospect it turns out that elsewhere liberalisation has acted as a spur for tremendous activity and high growth rates. Surely it is not beyond the capacity of Indian people, given the economic incentives, to achieve a similar economic take-off.

The economic rationale for the government's action in reducing the rates of direct taxation and excise duties (on selected items of mass consumption and on crucial inputs like electricity) is based on the fact that its previous taxation policies had become counter-productive and that the time had come to lower tax rates in order to both stimulate production and reduce evasion. The new fiscal measures have created a mood of optimism which is reflected in the unprecedented boom on the stock exchange, where the share prices of some top 50 companies have registered price increases ranging from 55% to 150%. The investment climate created in the country will result in increased output and income which in turn will increase the tax yield by widening the tax base. As a consequence, provided the government keeps its own expenditure in check, the budget deficit should over time be reduced. If this happens the danger of inflation will be considerably mitigated.

It is still premature to judge the success of the New Economic Policy, since it has only recently been initiated and the government is still under constant and powerful pressure from left-oriented politicians and academicians who favour increasing market interventionism under the garb of socialism. The past policies and programmes pursued as a part of the Centralised Planning framework have proved an unmistakable drag on the growth of the economy. However, there seems to be a determined effort by the Government to pursue market-oriented policies giving emphasis to economic efficiency and economic growth. It is therefore reasonable to expect that this market orientation in economic policy will be extended in future, leading to an improvement in the standard of living of the average Indian citizen.

NEW ZEALAND

DEREGULATION HIGHLIGHTS PROBLEMS OF MONETARY CONTROL

Introduction

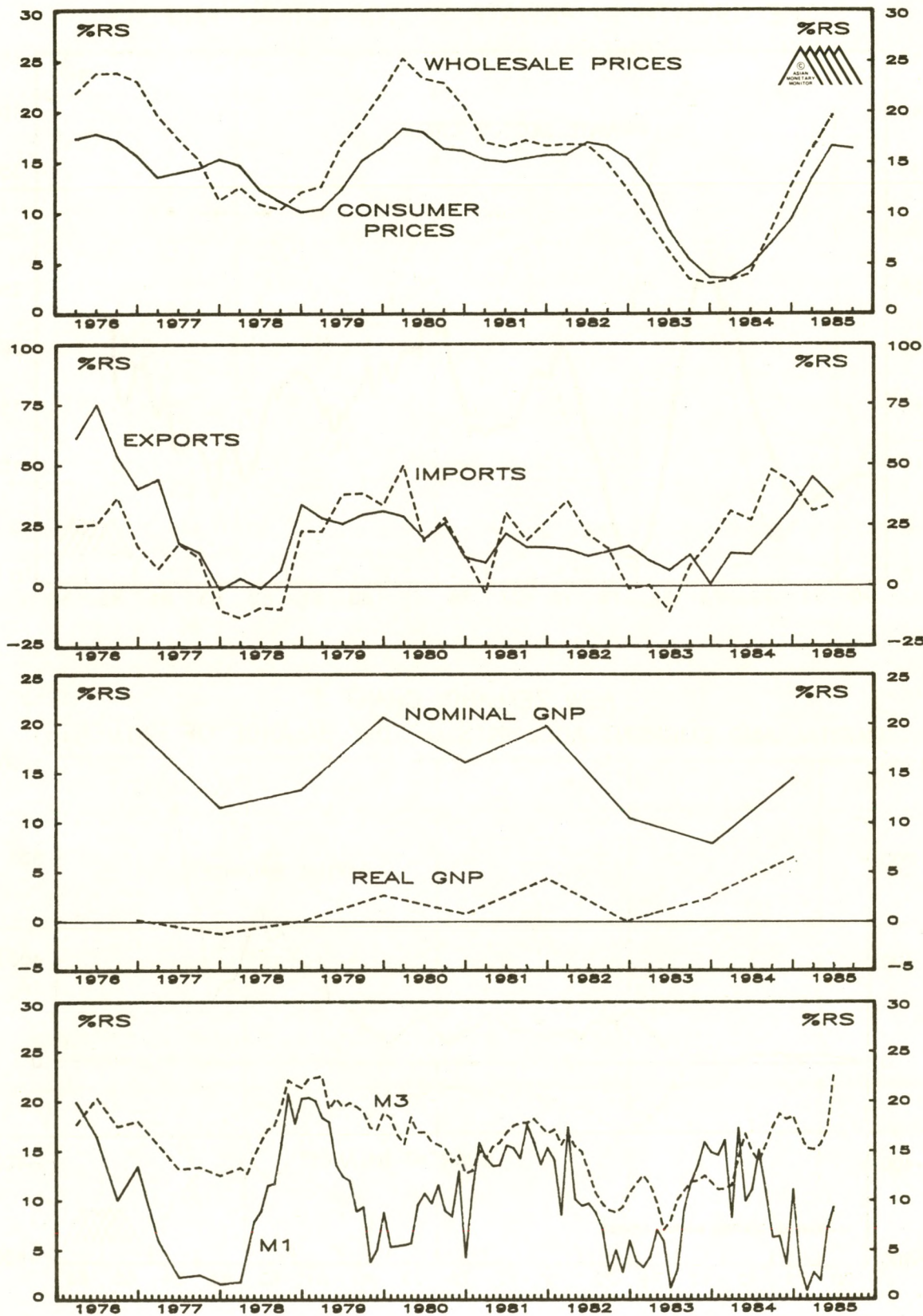
In the 15 months since the Labour Government was elected to power on 28 July 1984 the whole approach to economic management in New Zealand has been profoundly changed. The widespread policies of detailed intervention and regulation of economic processes have been swept aside and replaced with a set of integrated, market-based policies which have a medium-term focus.

When the present government took office it inherited an economic crisis of major proportions. There was an immediate and acute foreign exchange crisis which had developed in the month preceding the election, but in addition there was a broader crisis in the economy at large stemming from New Zealand's failure over a long period to adjust the internal structure of the economy in the face of changed external circumstances. In the period 1981-1984 these structural problems were compounded by the imposition of a web of interest rate controls which led to serious distortions in the financial system, which in turn helped to accentuate the foreign exchange crisis.

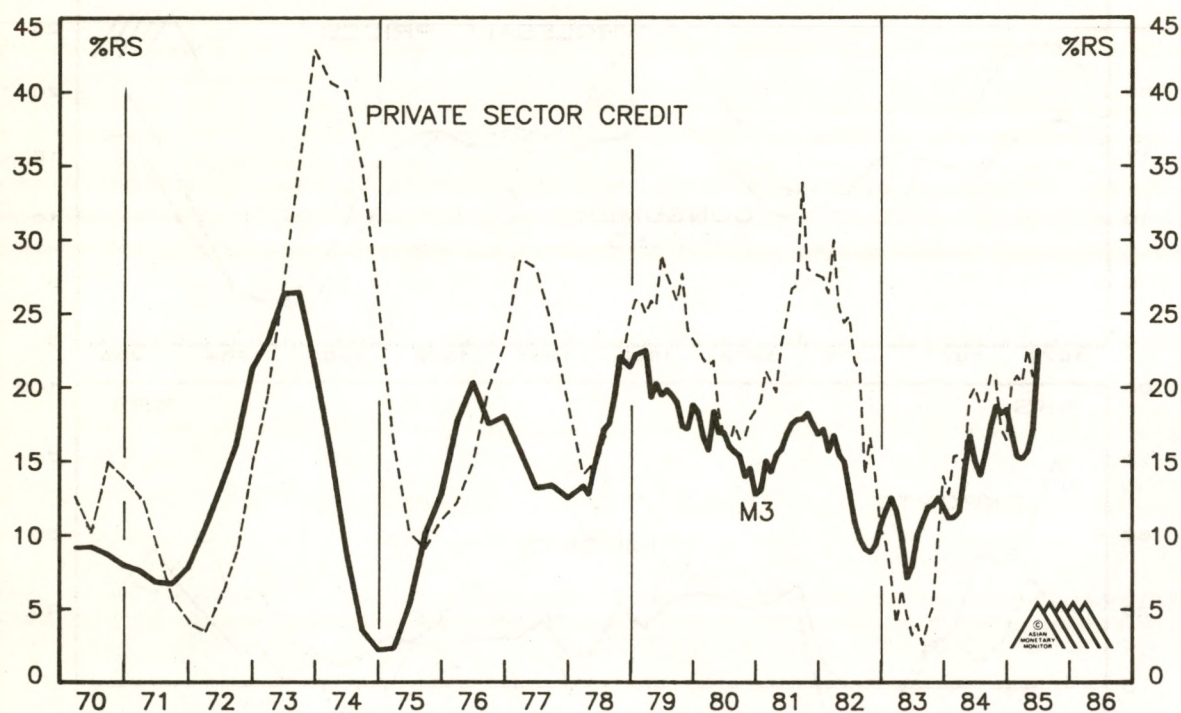
Persistent fiscal and balance of payments deficits in the 1970s had resulted in large domestic and overseas debt burdens. On the domestic side the fiscal deficit had grown from 2-3% of GDP in 1984 to 8.4% by 1984. On the external front, the New Zealand government chose to adjust to the oil crisis of 1973/74 not by reducing income and exporting more to pay for the higher cost of imports, but to maintain domestic living standards and finance the higher cost of oil imports by borrowing abroad. This policy might have succeeded if the terms of trade had somehow improved (i.e. if New Zealand's export prices had risen more than import prices in the subsequent period), but before there was any significant improvement the country was struck by the second oil crisis of 1979/80, which led to a further deterioration in the current account and a need for increased borrowing on capital account (see Chart 3). The recession of 1982 led to a temporary improvement in the current account deficit, but an acceleration in money and credit growth and hence nominal spending in 1983-84 (see Chart 2) has precipitated a further deterioration. In addition the devaluation of July 1984 has temporarily added to the import bill. Thus in the year to June 1985 the current account deficit registered NZ\$2,662 million, or just under \$700 million per quarter (see Chart 7).

Over the decade to 1984, NZ\$13 billion of official overseas debt was accumulated in order to insulate the domestic economy from the decline in New Zealand's terms of trade. As a result of this borrowing, the cost of interest payments on official overseas debt increased from 1.8% of total taxation in the year ended March 1975 to 7.4% of total taxation in the year to March 1985. The barrage of exchange controls which existed until their abolition in December 1984 was in effect, being used not to supplement short term stabilisation policies, but rather to maintain an overvalued exchange rate. At the same time domestic expenditure was allowed to expand more rapidly than aggregate income, resulting in continuous current account deficits. Rather than addressing the fundamental cause of these current account deficits, namely the government's expansionary financial policies, government economic management tended to focus on the symptoms of these deficits. For example attempts were made through industry-assistance programmes, export subsidies and incentives, and import protection to enhance the profitability of exporting industries. As a consequence the fundamental adjustments needed to shift resources from the domestic sectors into exporting were never accomplished, expenditures continued to exceed production, and the current account deficits persisted.

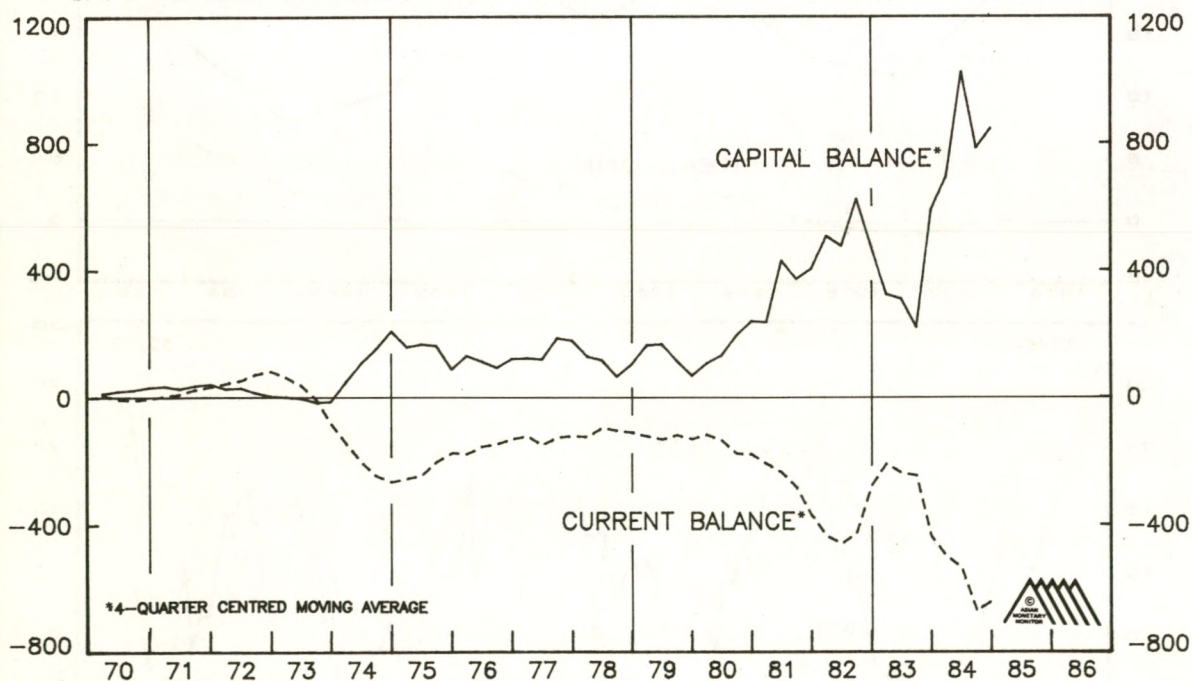
NEW ZEALAND: CHART 1 MONEY, OUTPUT, TRADE AND PRICES



NEW ZEALAND: CHART 2
THE GROWTH IN PRIVATE SECTOR CREDIT AND M3



NEW ZEALAND: CHART 3
CAPITAL AND CURRENT ACCOUNTS OF THE BALANCE OF PAYMENTS



It is greatly to the credit of the Labour Government that it has attempted to tackle both crises facing New Zealand - the immediate external crisis and the underlying domestic structural crisis in a comprehensive and coherent manner. Our Chronology of Deregulation (see page 20) details the individual measures of reform, but it is more appropriate from an analytical standpoint to group the subjects by policy-area. A brief summary of the changes affecting the external sector and the changes in fiscal policy will be given - since these will affect the long term performance of the economy - before examining the current methods of monetary control. Monetary control - or the lack of it - can affect both the short term performance of the economy as well as affecting the rate of inflation and the strength of the currency in the long term. Moreover, since New Zealand has developed some unique intermediate targets for monetary control these will require a more detailed treatment.

The External Sector Changes

The immediate foreign exchange crisis facing the new Prime Minister Mr. Lange in July 1984 was arrested by means of a 20% devaluation, immediately after the election (see Chart 4). Soon afterwards interest rate controls were lifted, and subsequently in December 1984 foreign exchange controls were largely removed. In January 1985 the government moved to a tendering system for Treasury bills, and in February the asset ratios imposed on financial institutions' portfolios were abolished. With interest rate controls removed and the conditions for effective government funding established, the rationale for maintaining a fixed exchange rate disappeared, and accordingly the way was open to float the New Zealand dollar from March 2nd, 1985.

Since its floatation the NZ dollar has recovered almost all of the ground lost as a result of the 20% devaluation in July 1984. Chart 5 shows the real effective exchange rate for the NZ currency, which measures its appreciation or depreciation against a trade-weighted basket of currencies, adjusted for relative consumer price inflation rates. As shown in that chart New Zealand's relative competitiveness improved between 1979 and 1981 (i.e. the real effective exchange rate declined), deteriorated sharply in 1982, was restored by the (Australian dollar) devaluation of March 1983, and then remained roughly unchanged until the 20% NZ\$ devaluation of July 1984. Following that devaluation, the combination of the appreciation of the NZ\$ on the foreign exchange markets (from 49 US cents to 57 US cents between July/August 1984 and October 1985) and the higher rate of inflation in consumer prices in New Zealand has almost entirely eroded the competitiveness gained by the devaluation. (Judging by the relative price performance of New Zealand's export products versus the prices of other countries' export products only slightly less of the gains in competitiveness due to the devaluation have been eroded.)

Will the rise in the real effective exchange rate prevent New Zealand from making the appropriate structural adjustments in its domestic and external economy? No doubt the authorities had been hoping that the devaluation of July 1984 would help to bring about some such economic adjustments, but it has to be remembered that the main motive of the devaluation was to curtail an accelerating capital outflow. Since the devaluation domestic interest rates have been freed from their artificial constraints, and the real rates of return available on financial assets in New Zealand have risen (see Charts 8 and 9), so that the incentive for capital outflows (or non-repatriation of export earnings etc.) has now disappeared, leaving only the problem of how long New Zealand can continue to finance its current account deficit (including the growing debt-servicing burden) by means of increasing overseas borrowing. There is no clear-cut answer to this problem. The ratio of outstanding foreign debt to GNP is clearly one contributing factor, as is the current level of interest and debt-repayments due on that outstanding debt. But supposing that the investment opportunities in New Zealand became more attractive and that the prejudicial restrictions against foreign ownership were eliminated so that foreign-owned claims on local New Zealand assets were largely in the form of equity, and most of the earnings on these assets were reinvested instead of being paid out in the

form of dividends, clearly the capacity of the country to absorb foreign claims (debt or equity) would be immensely enhanced.

The important point about the reforms in New Zealand's financial markets in this context is that the price of one of the country's chief factors of production (capital) has at last been brought into line with prices (yields) prevailing in the international market. Thus whereas a real effective exchange rate of just over 100 in 1983-84 (Chart 5) was probably unsustainable on account of the declining real rates of return available on government bonds in New Zealand, the big difference now is that although the real effective exchange rate is back at 100, the returns on capital are now sufficiently competitive with real returns elsewhere to underwrite the currency at this level. In all probability the misguided policies of the past decade or two will have wasted capital and misallocated resources, implying that New Zealand will need to import capital to rebuild its economic infrastructure, and therefore New Zealand will be a capital importing country for several years. So long as New Zealand operates a floating exchange rate and must run a current account deficit as a counterpart to these capital inflows, the New Zealand currency, like the US dollar between 1981 and March 1985, may well appear to be overvalued by most conventional measures.

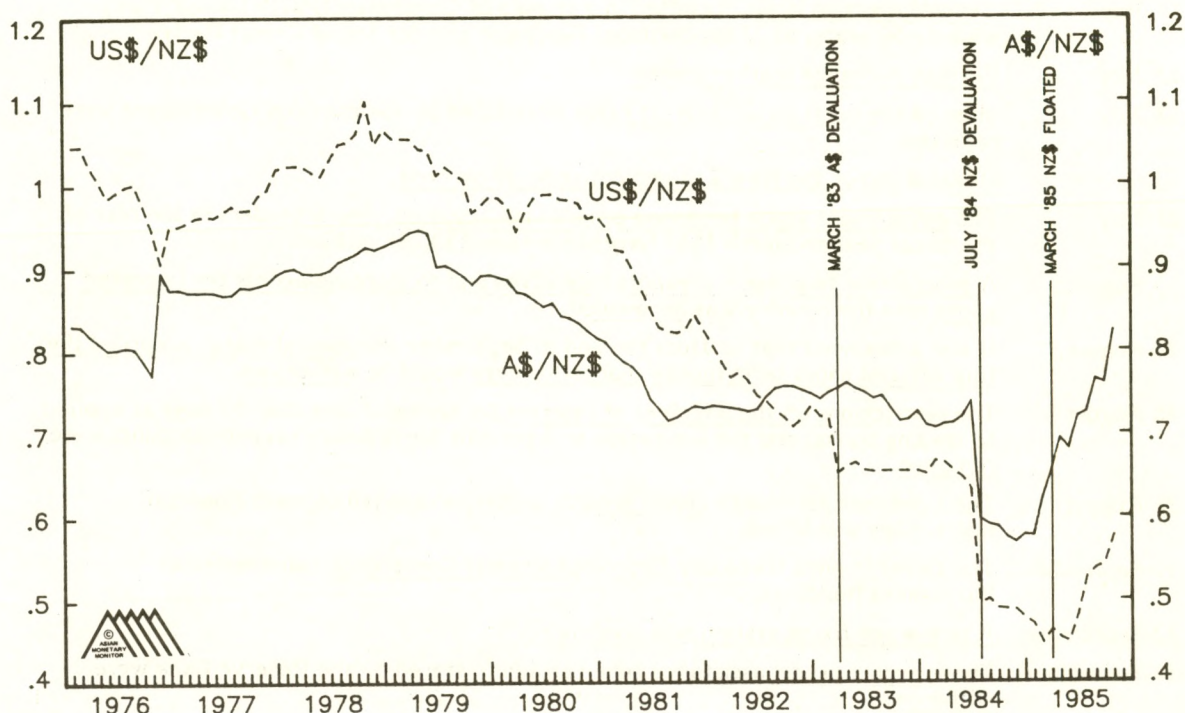
Fiscal Policy Changes

The 1984 Budget set a new tone for New Zealand budgets. First, it adopted a medium-term time horizon by indicating the direction of financial policy for several years ahead. Second, it marked a major shift away from the piecemeal approach of subsidies, tax concessions and other protective measures which had characterised economic policy in New Zealand for most of the past three decades. A whole range of subsidies and incentives was to be either removed completely or totally phased out over a period of years. For example, fertilizer and fertilizer transport subsidies, and farming and forestry investment incentives were to be terminated. It was also announced that imports would continue to receive increasing access. In the public sector government trading activities and services would be subjected to commercial operating rules, and more realistic pricing policies would be adopted. Thus the price of state-supplied electricity and coal would be increased to levels reflecting the full cost of supply; road user charges would be raised to recover costs; and interest rates on government-funded rural lending would be progressively raised to market levels.

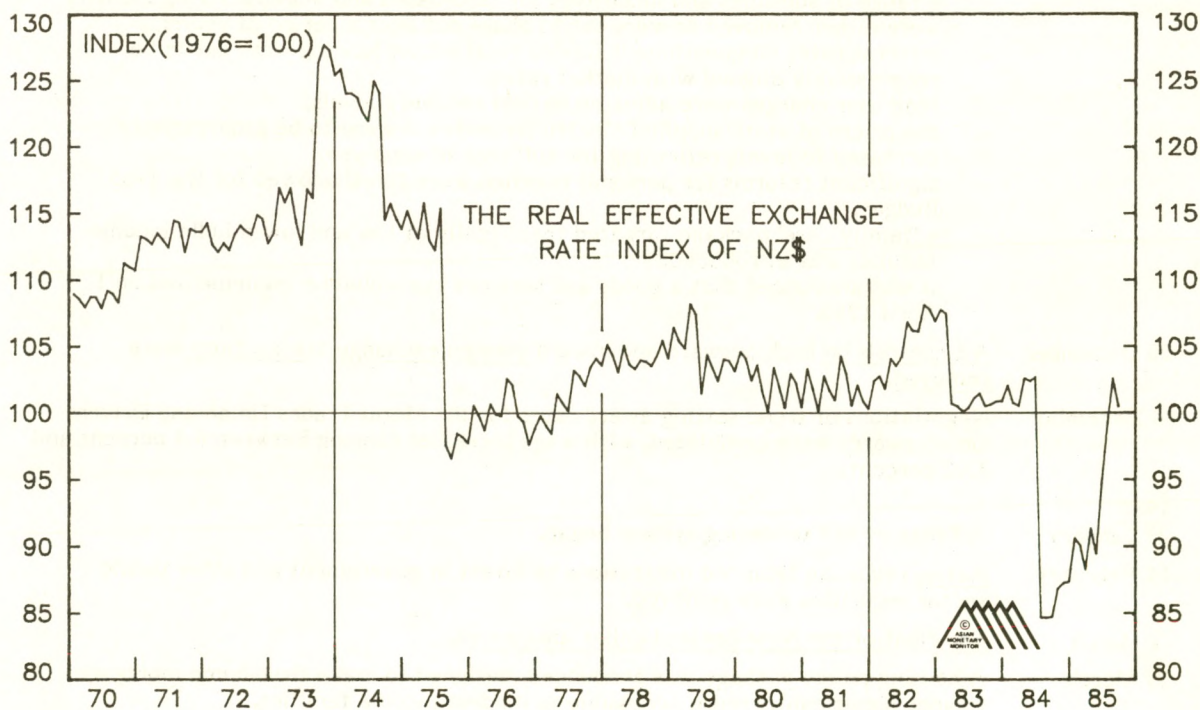
The general thrust of the new policy is to phase out industry assistance in order to improve resource allocation in the economy and to encourage a more competitive environment. In agriculture assistance programmes had become very widespread. The main rationale was that of 'compensation' for other forms of assistance and protection given to other activities, particularly tariffs or quotas accorded to import substitution activities. This policy has been pursued in the belief that the underlying level of competitiveness of farming and forestry in New Zealand were high. There had also been some 'compensation' based on the view that the exchange rate was overvalued.

The Muldoon administration had recognised some of the inefficiencies which these industry assistance programmes had created, and had instituted some modest reforms starting in 1982 to alleviate the cumulative structural difficulties. Also in 1984, prior to the election, the Supplementary Minimum Price (SMP) Scheme for agriculture was replaced with transitional arrangements aimed at its gradual phasing out. The November 1984 Budget set out a schedule for reducing the remaining agricultural assistance plans over the next 3 years. In other spheres, the tax incentives offered to exporters were to be phased out by 1987, and the practice of import licensing is to be terminated in stages, though this will take several years because the authorities wish to provide domestic competitors with the opportunity to revamp their production methods or diversify out of the activity concerned gradually over several years. The government has also indicated that it will be lowering import tariff rates. On the domestic front the transportation industry was gradually being liberalised under the previous government by the granting of

NEW ZEALAND: CHART 4
NZ\$ EXCHANGE RATE VERSUS US\$ AND A\$



NEW ZEALAND: CHART 5
THE REAL EFFECTIVE EXCHANGE RATE INDEX OF NZ\$



CHRONOLOGY OF DEREGULATION (JULY 1984 – MARCH 1985)

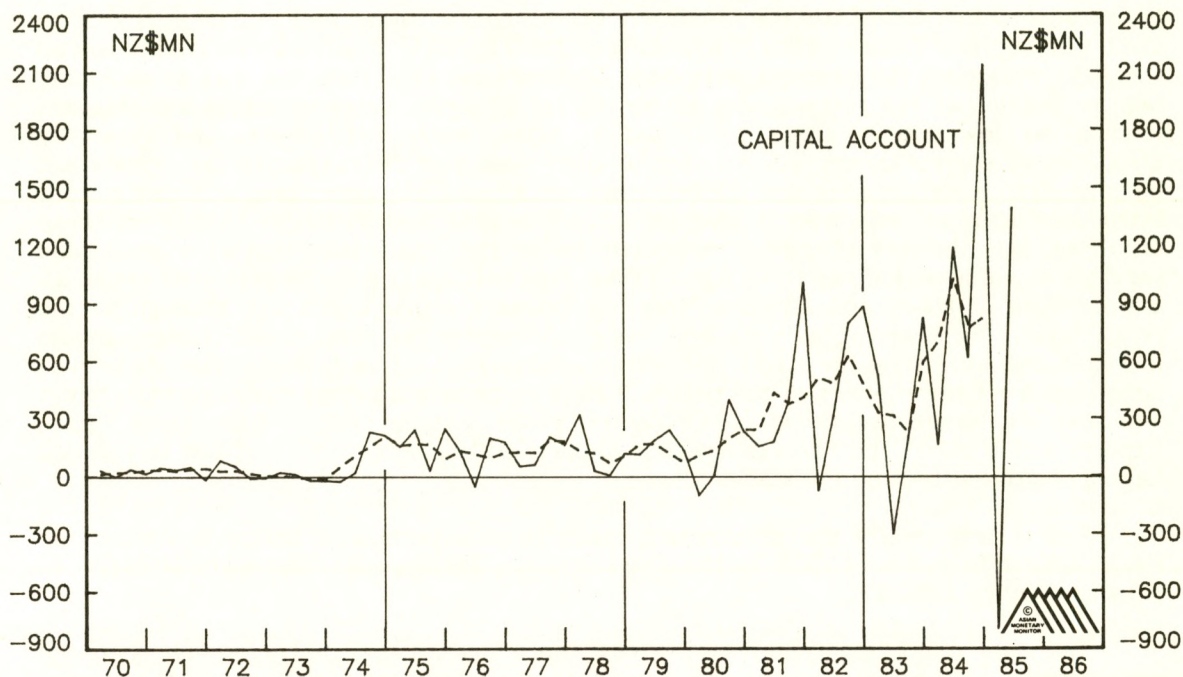
1984

- 14 July General election held. Resulted in a change of Government, with Labour Party winning 56 seats, to 37 for National Party and two for Social Credit Party.
- 15 July Foreign exchange market closed.
- 18 July Most of the controls on interest rates introduced by the previous Government were removed.
Devaluation of the New Zealand dollar by 20 percent.
- 27 July The government stock tendering programme resumed. Stock tenders in the rest of the fiscal year to March 1985 have since raised \$3,087 million.
- 15 August A programme to phase out export incentives and to increase access for imported goods into the country was announced.
- 23 August It was announced that as from the end of September the special status accorded the four official short term money market dealers would be withdrawn.
- 30 August The restrictions on the payment of interest for terms of less than 30 days as applied to trading banks, and the limitation to 3 percent for ordinary savings accounts were removed.
- 31 August The 1 percent per month credit growth 'guideline' applied to main financial institutions was lifted.
- 12 September The Government's three day Economic Summit Conference commenced at Parliament Buildings.
- 13 September A new wage fixing system was announced.
- 14 September Three export credit assistance schemes administered by the Reserve Bank were withdrawn.
- 10 October The Reserve Bank announced its intention to engage in regular open market operations in order to smooth liquidity fluctuations in a manner supportive of the Government's overall monetary policy objectives.
- 8 November The 1984 Budget was presented. The Budget foreshadowed major changes to the tax system. Major features were:
- a range of subsidies and incentives for land-based and manufacturing industry were either removed or were set to phase out over a period of years;
 - interest rates on government funded rural sector lending were set to be progressively aligned with market rates;
 - road user charges were adjusted to cost recovery levels;
 - the prices of state supplied electricity and coal were to be progressively increased to levels reflecting the full cost of supply;
 - significant reforms for personal taxation were foreshadowed for the 1985 Budget;
 - a 'family care' package targeted specifically at low and low-middle income families was introduced;
 - it was announced that a goods and services tax would be implemented on 1 April 1986.
- 20 December All controls on both outward and inward foreign exchange transactions were removed.
- 6 December Negotiations of trend setting award rates for the Metal Trades Union and Drivers Union awards were completed, with wage increases ranging between 6.4 percent and 7.02 percent.

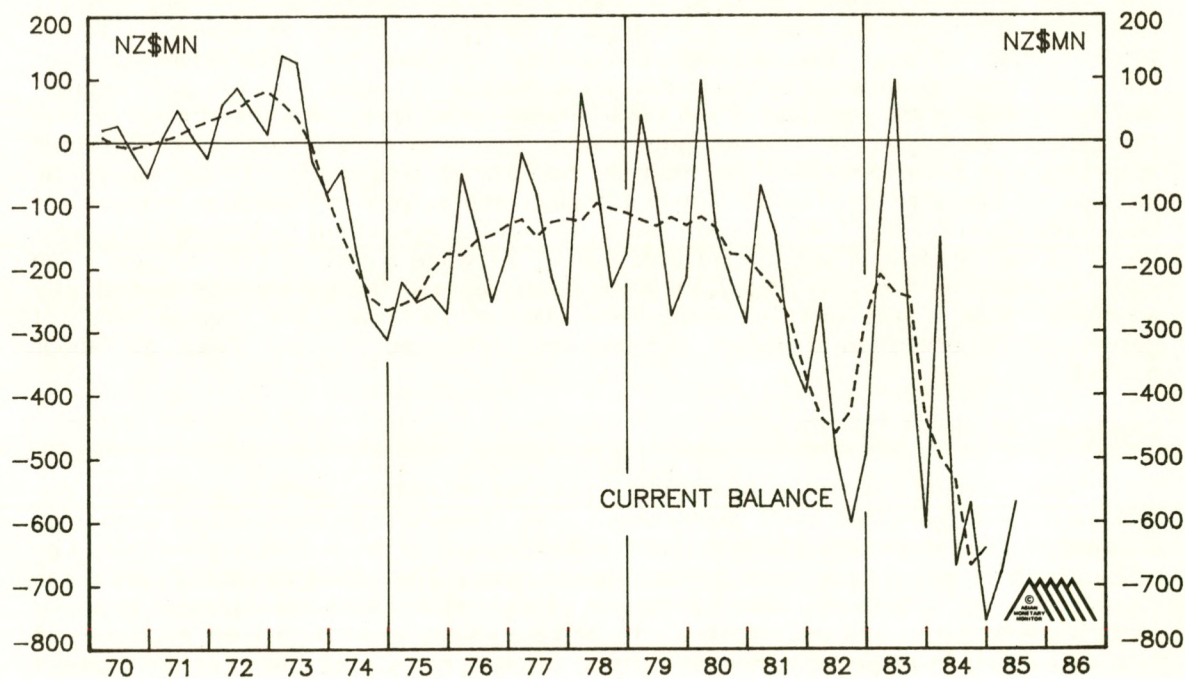
1985

- 29 January A Treasury bill tendering system began.
- 14 February Ratios requiring financed institutions to invest in government and other public sector securities were removed.
- 2 March The float of the New Zealand dollar announced.
- 29 March A housing policy package was announced, designed to make first-home mortgage finance significantly more accessible to modest income families.

NEW ZEALAND: CHART 6
CAPITAL ACCOUNT BALANCE



NEW ZEALAND: CHART 7
CURRENT ACCOUNT BALANCE



more licenses, and this approach is being extended by the current Labour government.

Third, on the revenue side an important shift was made towards indirect taxation to be introduced in 1986. Direct and indirect taxes together amounted to 33.6% of GDP in 1982, putting New Zealand 15th in a ranking of the 23 OECD countries - relatively low on the list. However, the problem with New Zealand's tax structure was that an unusually high proportion of tax revenue was accounted for by direct taxes on wages and salaries, leading to low labour force participation rates, early retirement, and generally discouraging entrepreneurship. Another problem was that the corporate tax system had become extremely complex and distortionary because of tax incentives and concessions introduced progressively over a long period. The 1984 Budget began to address these problems, but the key change is expected to be the implementation of a goods and services or value-added tax from April 1986. This will apply a uniform rate of tax to all transactions of goods and services from the primary production stage through to the retail level. By lowering average and marginal income tax rates these changes should increase the incentives to effort and encourage savings. It will mean that those who benefited from tax shelters in the past will have to contribute more tax payments, but it will also encourage investment since capital goods will be exempt from these taxes. Exports will similarly be tax-exempt, but imports will be subject to tax, and this should have a positive effect on the trade balance.

Fourth and finally the government made it an objective of policy to reduce the fiscal deficit from 9% of GDP in 1983/84 under the previous Muldoon administration to 3.3% of GDP by 1986/87.

The only major exception to the new more market-oriented approach is in the government's policy towards wage-fixing, where the system of national awards has been retained. Under this system minimum wage levels are set, together with conditions of employment across industry and occupation groupings. Negotiations are held to decide wage-increases for certain important categories of employee, and these changes are then transmitted to other ranks and other sectors via pre-defined tables of relativities. While the new government has attempted to introduce some flexibility into the system, the basic mechanism has been retained and continues to play havoc with the proper allocation of labour between sectors. It is extremely difficult for an expanding industry to attract labour; it remains very hard for a shrinking industry to reduce its labour force. Also, through the detailed consultative process the government remains intimately involved in wage negotiations in a wide range of private sector undertakings. Moreover, despite the abolition of the 1982-84 wage-price freeze the government retains the general view that an incomes policy is an essential counterpart of a restrained monetary and fiscal policies - i.e. that in this crucial area market forces cannot be allowed to operate too freely. Thus although there were no specific government guidelines given for the 1984/85 wage round, the unions agreed not to attempt to recoup losses of real disposable income suffered during the wage freeze of 1982-84, and when wage increases in the area of 6-7.5% were finally agreed the government specifically announced that it was satisfied with these rates of increase. The "visible hand" of government intervention therefore remains very prominent in New Zealand's labour market.

Changes in Monetary Control

New Zealand currently faces two types of monetary control problem - one transitory and the other more permanent. The transitory problem arises simply on account of the recent deregulatory moves and is similar to the problems experienced by other countries which have decontrolled interest rates. The lifting of controls results in considerable shifts between different deposit categories and between different financial institutions as firms and individuals in the private sector re-arrange their portfolios of financial assets in response to the new set of interest rates available. For the moment these portfolio shifts (or disintermediation) are being held responsible for much of the

HOW THE RESERVE BANK CONTROLS PRIMARY LIQUIDITY

<u>RB Liabilities</u> (+ indicates increase in account size; - indicates decrease in account size)					
	(1)	(2)	(3)	(4)	(5) (6)
1. Note Issue					
a. Cash held by public			+	-	
b. Cash held by banks					
2. Deposits of Trading Banks and POSB	+	-	-	+	+
3. Government Accounts (NZ\$)	-	+			-
<u>RB Assets</u> (- indicates a sale; + indicates a purchase)					
Action required by RB:					
Case (1) Sales of Govt. Stock (Bonds)	-				
Case (2) Purchase of Govt. Stock		+			
Case (3) Purchase of Govt. Securities			+		
Case (4) Sale of Govt. Securities				-	
Case (5) Sale of Govt. Securities					-
Case (6) Purchase of Govt. Securities					+

Actions
to offset
government
payments to
or receipts
from private
sector

Actions
required to
offset
seasonal
variations
in the note
issue

Actions
to offset
government
acquisition
or sale of
foreign
exchange

- Case (1) Full funding of Liquidity Injection (i.e. sale of government stock to private sector to absorb increase in reserve deposits of Trading Banks or POSB due to government payments to private sector).
- Case (2) Re injection of liquidity (i.e. Open Market Purchase of Government securities to compensate for reduction in Trading Bank or POSB balances at Reserve Bank due to private sector payments to government).
- Case (3) Purchase of Government securities from private sector to compensate for decline in Trading Bank/POSB balances at Reserve Bank due to increase in demand for banknotes by nonbank public.
- Case (4) Sale of Government securities to private sector to offset rise in Trading Bank/POSB balances at Reserve Bank due to decline in note issue.
- Case (5) Sale of Government securities to private sector to counteract increase in Trading Bank/POSB deposits at Reserve Bank due to government purchases of foreign exchange.
- Case (6) Purchase of Government securities from private sector to offset decline in Trading Bank/POSB balances at Reserve Bank due to government sales of foreign exchange.

SIMPLIFIED CONSOLIDATED BALANCE SHEETS FOR NEW ZEALAND'S FINANCIAL SYSTEM

ASSETS

LIABILITIES

Reserve Bank

1. Foreign Exchange and Gold 2. Private Sector Securities 3. Short term Govt. Securities 4. Other Assets (net)	5. Bank notes and coin = 8 + 14 6. Trading Bank Deposits 7. Govt. Deposits
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Trading Banks and POSB

8. Cash currency 9. Deposits at RB = 6 10. Short term Govt. Securities 11. Loans 12. Other Assets (net)	13. Deposits of Non Bank Public
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Non Bank Public

14. Cash currency 15. Deposits = 13 16. Short term Govt. Securities 17. Other Assets (net)	18. Bank Borrowings
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New Zealand Government

19. Deposits at RB 20. Other Assets (net)	21. Govt. Debt Issued = 3+10+16 + Long Term Debt
--	---

22. Monetary Base = $5 + 6 = 1 + 2 + 3 + 4 - 7$

23. Primary Liquidity = $8 + 9 + 10 + 16$

24. Money Supply = $14 + 15$

where $14 = 5 - 8$

and $15 = 13 = t. (8+9) *$

and $15 = 13 = k. 14$

* Note: In New Zealand there has been no requirement for banks to hold minimum required deposits or reserve deposits at the Reserve Bank, and therefore it has not always been a stable variable, but the ratio of demand deposits to cash currency held by the banks has been quite stable, as one would expect.

PRIMARY LIQUIDITY CONTROL DOES NOT ENSURE MONETARY CONTROL

The minimum requirements for monetary control are (i) control of the monetary base and (ii) stability or at least reasonable predictability of the public's deposit-to-currency ratio. In addition some central banks impose (iii) a required reserve ratio on banks such that their vault cash plus deposits at the central bank are maintained at some minimum ratio to their deposit liabilities over a period of 2 weeks or a month, but this condition is not necessary for monetary control. (See AMM Vol. 7 No. 5 p. 21.) However, the New Zealand authorities have so far not adopted any of these three tools of monetary control, even though it is clear they could adopt (i), and condition (ii) is satisfied as shown by Chart 11.

Since the floating of the currency, the Reserve Bank no longer controls the price (in terms of foreign currency) of the NZ\$; nor does it have a policy to control the monetary base ($22 = 5 + 6$ in the tables opposite). Instead the Reserve Bank aims to regulate the quantity of "Primary Liquidity", which is defined as vault cash and deposits of banks at the Reserve Bank, plus all private sector holdings of discountable government securities (i.e. with less than 6 months to maturity). This concept is not an orthodox monetary base concept i.e. it is not a measure of Reserve Bank liabilities owned by the private sector (banks and non bank entities). Primary liquidity measures those assets "available to the private sector for settlement with the Reserve Bank", since the Bank will purchase on demand through its discount window Treasury Bills and other government stock with less than six months to maturity at a margin of 1 percent above market yields, and cash and deposits at the Reserve Bank are ipso facto means of settlement with the Reserve Bank.

Note that within Primary Liquidity ($8+9+10+16$) the two latter components cannot be found on the books of the Reserve Bank, and therefore the total is not absolutely subject to Reserve Bank control as the monetary base ($5+6$) would be. Insofar as the Reserve Bank, as agent for the government, can determine the maturity structure of the outstanding government debt in the short run it can closely influence total Primary Liquidity, but it cannot control the proportion of short term government securities held by the banks versus the proportion held by the non bank public (10 and 16 respectively). Nor is there any theory linking the quantity of short term government securities held by these two groups to the level of the money supply.

The regulation of Primary Liquidity is really a method of ensuring that seasonal fluctuations of liquidity (due to private sector payments to or receipts from government accounts at the Reserve Bank) are neutralised - as explained on page 23 - while also ensuring that the Reserve Bank does not permanently fund or monetise the government's debt. While there is a good argument for neutralising seasonal fluctuations of liquidity, open market operations are not the only available method. Significant reductions in seasonal liquidity fluctuations could be achieved by transferring some of the government's accounts (e.g. Producer Boards) from the Reserve Bank to the Trading Banks. In any case seasonal fluctuations in the government's accounts and hence in private sector liquidity are no barrier to controlling the seasonally adjusted monetary base or the seasonally adjusted money supply. As for monetising the government's debt, the important point is not the type of instruments the Reserve Bank holds as assets corresponding to the base, but the amount of such instruments purchased by the Reserve Bank (see Chart 10). Even if it does not buy any government securities the Reserve Bank could still expand the money supply too much by buying foreign exchange or by buying other domestic securities, or by making outright loans to the banks or to the non-bank private sector directly. Equally the Reserve Bank could produce a monetary contraction by buying large quantities of government debt while more than offsetting these purchases with substantial sales of private sector paper or foreign assets.

The linkages between Primary Liquidity and the Money Supply are thus tenuous and unreliable. As an intermediate target for monetary control purposes Primary Liquidity is therefore seriously defective, and would be better replaced with an orthodox monetary base concept.

apparent rapid growth of the measured money and credit aggregates in New Zealand. Not only are individuals and firms holding more time and savings deposits now that the interest rates are once more attractive in real terms, but the banks are winning back some of the market share which they lost during the era of controls.

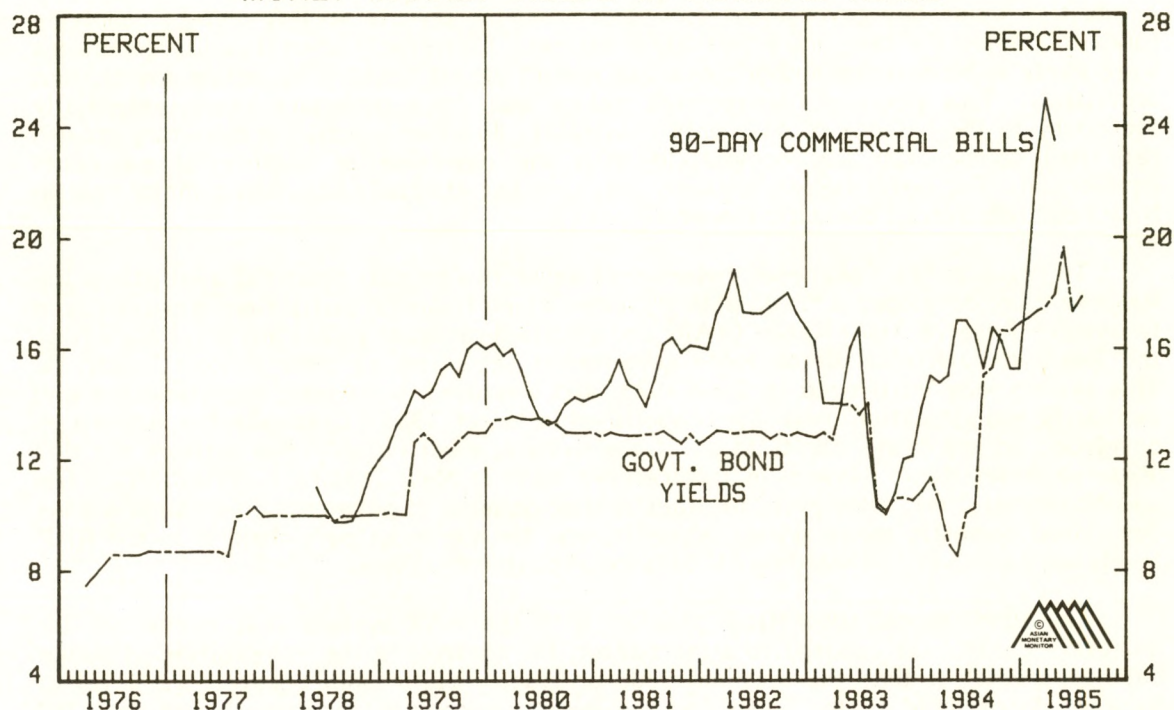
The second type of monetary control problem which New Zealand faces is more permanent and therefore more serious. The problem is that having floated the New Zealand dollar (i.e. freed up its price), the Reserve Bank has not taken satisfactory or adequate steps to ensure that the money supply (i.e. the quantity of NZ\$) is properly controlled. In short the authorities do not have any reliable method of monetary base control; instead they are continuing to rely on the control of so-called "primary liquidity" - a concept which is fundamentally inappropriate for control of the money supply. To understand the deficiencies of monetary control by means of the "primary liquidity" concept it is useful to review briefly the history of monetary control in New Zealand over the past decade.

So long as New Zealand had a fixed exchange rate no explicit method of monetary control was needed since the money supply was continuously adjusting to whatever level was required to ensure equilibrium in the overall balance of payments at the fixed exchange rate. If the private sector was running a balance of payments deficit on current and capital account combined, the Reserve Bank had to step in on a daily basis and supply the foreign exchange required to make good the shortfall of foreign currency in the foreign exchange market. This would require selling foreign currency, buying New Zealand currency, and ultimately debiting the accounts of the Trading Banks at the Reserve Bank in respect of the domestic currency purchased. This intervention would put pressure on the liquidity position of the Trading Banks, force up interest rates and tighten the money supply until the pressures producing the original private sector payments deficit were counteracted. This basic mechanism was supplemented with exchange controls - i.e. restrictions on New Zealand residents' ability to acquire foreign currency. Also, instead of relying solely on official reserves to compensate for private sector deficits - which would have implied unavoidable periods of monetary stringency - the authorities undertook extensive overseas borrowing programmes to bolster the supply of foreign currency available to support the NZ dollar. However, exchange controls and foreign borrowing could only provide a temporary palliative to over-expansionary domestic monetary growth, and in the end either monetary policy had to be adjusted, or - more usually - the parity for the exchange rate had to be devalued.

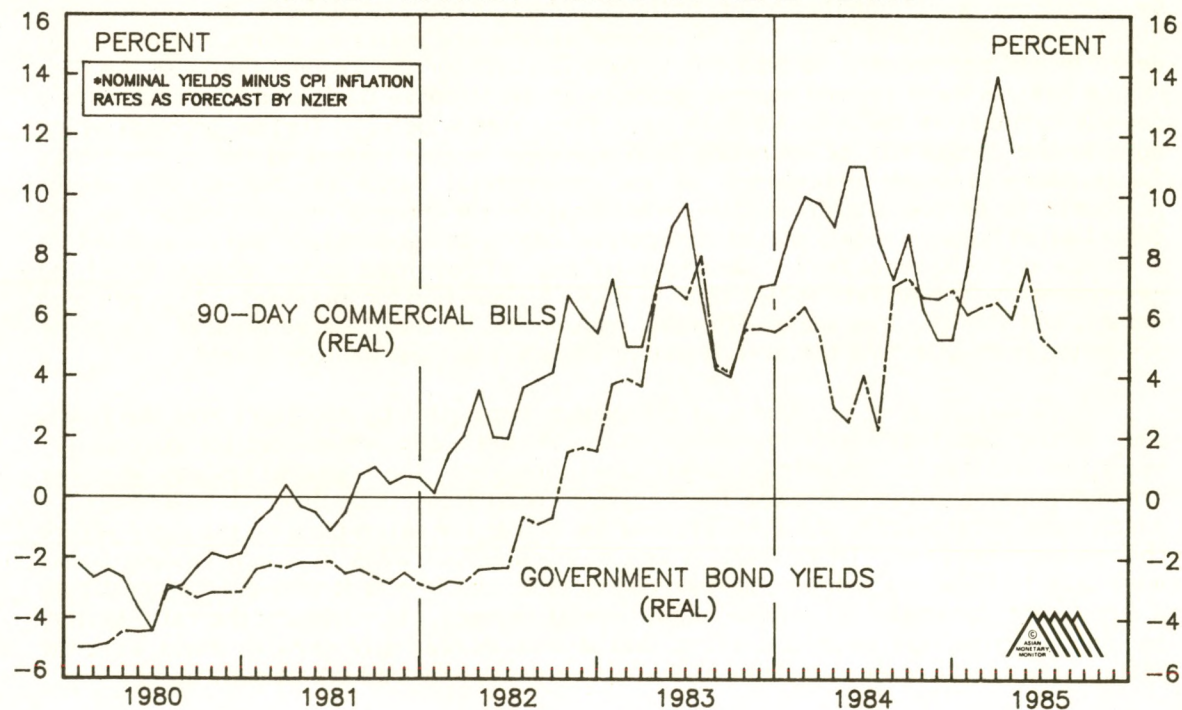
This basic mechanism remained intact when New Zealand shifted from a fixed exchange rate system to a system whereby the value of the New Zealand dollar was fixed against a basket of currencies from July 1973. Thus there were periodic devaluations of the NZ\$ in September 1974 (-6.2%), August 1975 (-15%), November 1976 (-2.7%) and in June 1979 (-5%). Between June 1979 and June 1982 a 'crawling peg' approach to exchange rate determination was adopted, whereby the NZ\$ was adjusted by frequent, small amounts. Again the implications for monetary control were essentially similar: the money supply had to be permitted to adjust to whatever was consistent with maintenance of equilibrium at the daily parity. From June 1982 to 1st March 1985 New Zealand reverted to fixing its exchange rate against a basket of currencies, with the Reserve Bank once more acting as the residual buyer or seller of foreign exchange - effectively clearing the market at the basket rate by providing foreign exchange or purchasing foreign exchange in whatever quantity was required to balance the private sector's supply and demand for foreign exchange.

Throughout these periods of fixed or managed exchange rate arrangements (whether basket or crawling peg) the ultimate determinant of monetary conditions was the external balance of payments. However, within the calendar year the New Zealand economy was subject to a highly seasonal pattern of payments due to the concentration of tax payments in March, and due to a variety of agricultural or farm price stabilisation systems. To relieve the pressure on interest rates at times when the private sector was

NEW ZEALAND: CHART 8
MONEY MARKET YIELDS IN NOMINAL TERMS



NEW ZEALAND: CHART 9
MONEY MARKET YIELDS IN REAL TERMS*



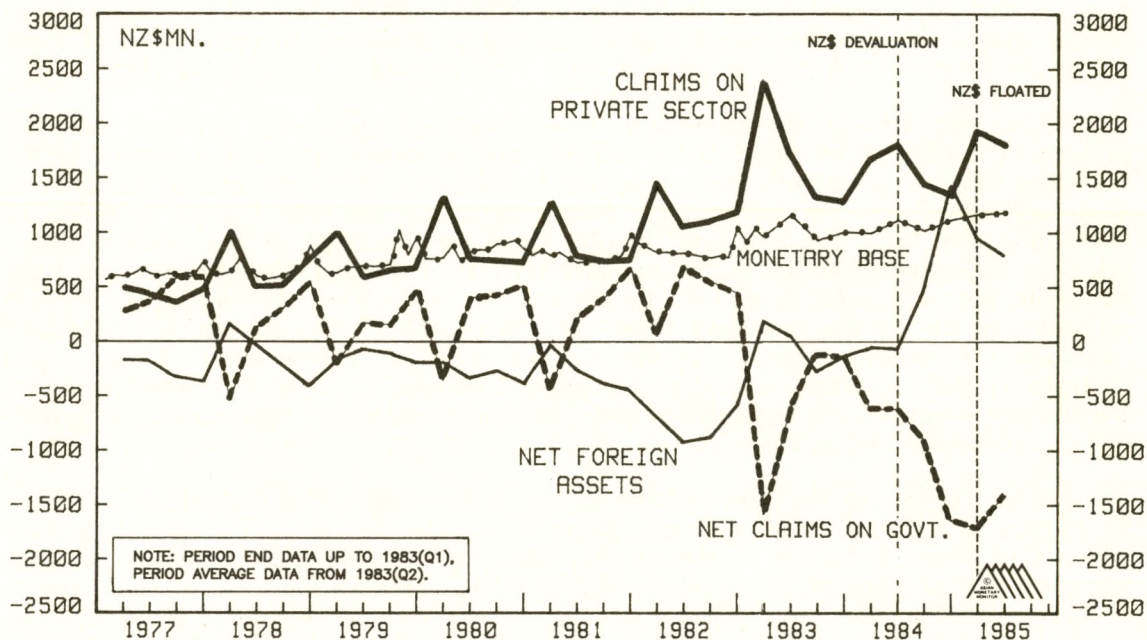
making large payments to the government's accounts at the Reserve Bank, the monetary authorities would buy government securities from the private sector, thereby supplying funds to relieve the temporary liquidity pressures. Conversely when liquidity conditions were likely to be easy the authorities would absorb excess liquidity by selling government securities. This liquidity management policy was, in a monetary sense, essentially secondary to the balance of payments constraint. In other words, the monetary growth rate had to be basically compatible with the objective of balance of payments equilibrium. But nevertheless, liquidity management gradually assumed a major role in New Zealand's overall domestic monetary policy.

To regulate the volume of government securities held by financial institutions the Reserve Bank developed a "ratio policy", under which financial institutions were required to observe Reserve Asset Ratios (RAR) i.e. specified ratios of vault cash plus balances at the Reserve Bank plus discountable government securities to their deposit liabilities. This system was introduced in June 1973, and was used, with some modifications and increasing sophistication until it was abolished in March 1985. Gradually the authorities developed an elaborate justification of the system, most notably two articles entitled 'Reserve Asset Ratio System' in the Reserve Bank of New Zealand Bulletin in October and November 1981. However, the fact is that balance of payments constraints always dominated domestic monetary adjustments, and for the most part changes in the RAR levels were incapable of warding off balance of payments crises.

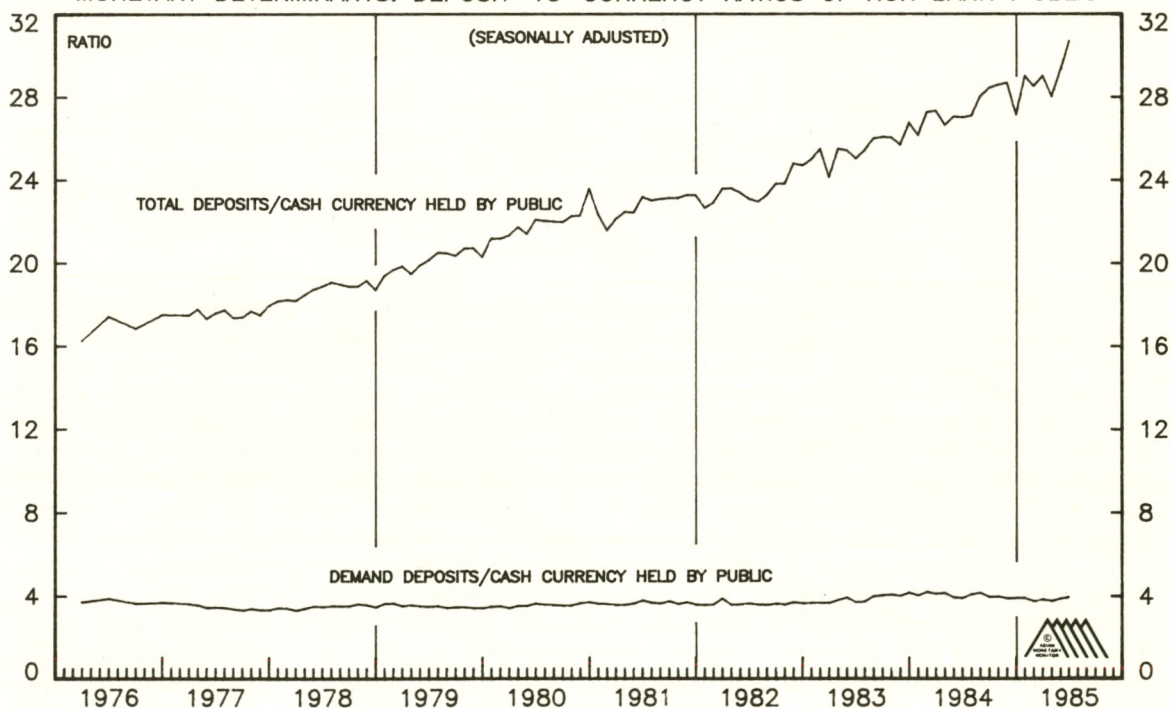
The fundamental theoretical problem with the RAR system as a mechanism for monetary control (as opposed to a mechanism for controlling the composition of banks' balance sheets) is that there is no clear or stable relationship between the level of Reserve Assets held by the banks and the level of money balances (cash plus deposits) held by the non-bank private sector. The reason is that while the Reserve Bank may be able to control the total quantity of cash and deposits at the Reserve Bank (i.e. the monetary base), it is unable to manage private sector holdings of government securities (which comprise the other component of Reserve Assets) - let alone the proportion of such securities held by the banks. Matters have been made more difficult in recent years by persistent government budget deficits, which have raised both the outstanding quantity of government debt and the volume of new and maturing issues of government debt. In addition there is no tradition in New Zealand for the Trading Banks or the Post Office Savings Bank to hold reserve deposits at the Reserve Bank, and in practice their deposit balances at the Reserve Bank have fluctuated widely. A further problem which adds to the complexity of operating such a system is that instead of the government's fiscal balances being maintained at the commercial banks so that private sector payments to or receipts from the government sector have a minimal effect on the consolidated balance sheets of the commercial banks, the government has maintained its accounts at the Reserve Bank. Consequently any net payments to (or receipts from) the government by the private sector tend to cause a reduction (or increase) in high powered money, and this requires some offsetting transaction by the Reserve Bank if it is to be prevented from affecting the overall size of commercial bank balance sheets.

A variety of other criticisms of the system were made by observers over the years, such as the fact that high compulsory ratios created a captive market for government securities and thereby distorted interest rates throughout the financial system. Another critique pointed to the increasing tendency for credit flows to be diverted to institutions which were not subject to the RAR system; the higher the ratios became the more severe this problem became. There were in any case numerous ways in which Trading Banks were able to finance a shortage of reserve assets so that in effect they did not constitute a significant constraint on private sector credit demand. In summary the ratio system became progressively more distorting, and it was increasingly open to doubt that the system was operating as intended - at least in respect to overall credit control.

NEW ZEALAND: CHART 10
THE MONETARY BASE AND CORRESPONDING ASSETS



NEW ZEALAND: CHART 11
MONETARY DETERMINANTS: DEPOSIT-TO-CURRENCY RATIOS OF NON BANK PUBLIC



With the decision to abolish interest rate controls in July 1984, and following the change to a system of competitive tendering for the issue of government securities in January 1985 the New Zealand authorities decided that the needs of all sectors could best be met not by restricting particular institutions' portfolios, but by ensuring that normal market mechanisms worked as efficiently as possible. In recognition of these points the government lifted all forms of ratio requirements on 11 February 1985.

However, although the authorities have abandoned the formal parts of the RAR system, including the specified ratios and the interest rate controls, the curious fact is that they have retained both the conceptual framework and the rhetoric of the system. Monetary policy and the government debt programme are now framed in terms of containing the "base liquid assets" or the "primary liquidity" of the system, and a principal objective of policy is "to virtually fully fund through domestic borrowing the net public sector liquidity injection. Essentially this aim amounts to keeping the level of primary liquidity (or the monetary base - sic) fairly stable. This is seen as a necessary condition for monetary control in the medium term (since) the level of base liquid reserves of the institutions effectively imposes a constraint on the extent to which the balance sheets of the institutions, and thus money and credit aggregates, can grow". (RB Bulletin, May 1985 p. 236)

In fact of course the intermediate objective specified by the authorities - primary liquidity - is not the monetary base as conventionally defined. The monetary base consists of those liabilities of the central bank held by the private sector i.e. cash currency plus deposits of banks at the central bank. Because the total of these two is reliably related to the overall money supply, which in turn is the private sector's means of payment, the base as conventionally defined is a dependable means of monetary control. But as explained earlier, there is no necessary connection between the primary liquidity and the money supply, and indeed control of primary liquidity is neither necessary nor sufficient for monetary control. As a simple illustration one may take the case where the government budget deficit and the volume of short-term government securities are falling, but the authorities are keeping interest rates below their equilibrium level, or they are temporarily holding the exchange rate below its equilibrium level. Either of the latter two actions could produce rapid monetary growth at the same time as primary liquidity was actually declining in absolute volume.

FORECAST: In a nutshell the New Zealand authorities' problem is that they have abandoned control of the price of money (i.e. the exchange rate), but they have not yet replaced it with a reliable or dependable method of controlling the quantity of money. Their chosen concept of "Primary Liquidity" is a carryover from the Reserve Asset Ratio system, yet it does not have any precise mathematical or conceptual connection with the money supply as does the conventional monetary base.

Thus while the authorities may be correct in explaining New Zealand's recent surge in monetary growth as being due to re-intermediation (i.e. a switch of funds out of quasi-banks or non-banks back into the traditional banking institutions), based on the rise in real interest rates following the abolition of interest rate controls and the changes in the tax system, it is at least open to doubt whether a reliable system of monetary control has yet been implemented. The re-intermediation problem is essentially transitory; the more serious and longer term question is whether the authorities' concept of "Primary Liquidity" will prove a successful method of implementing monetary control. Over the past year in New Zealand prices have risen partly as a result of the 20% devaluation of July 1984, and partly as a result of the lifting of the wage-price freeze. If the government adopts an indirect tax system such as the value-added tax, the measured indices of inflation (CPI etc.) will again show a further increase in 1986, but thereafter the honeymoon will be over. The re-intermediation process will have ceased, and the authorities will no longer be able to 'explain' inflation by pointing to exogenous factors. Monetary growth will have to slow down significantly in 1986 if persistent inflation is to be avoided.

SINGAPORE

A MAJOR TURNING POINT IN MONETARY TRENDS

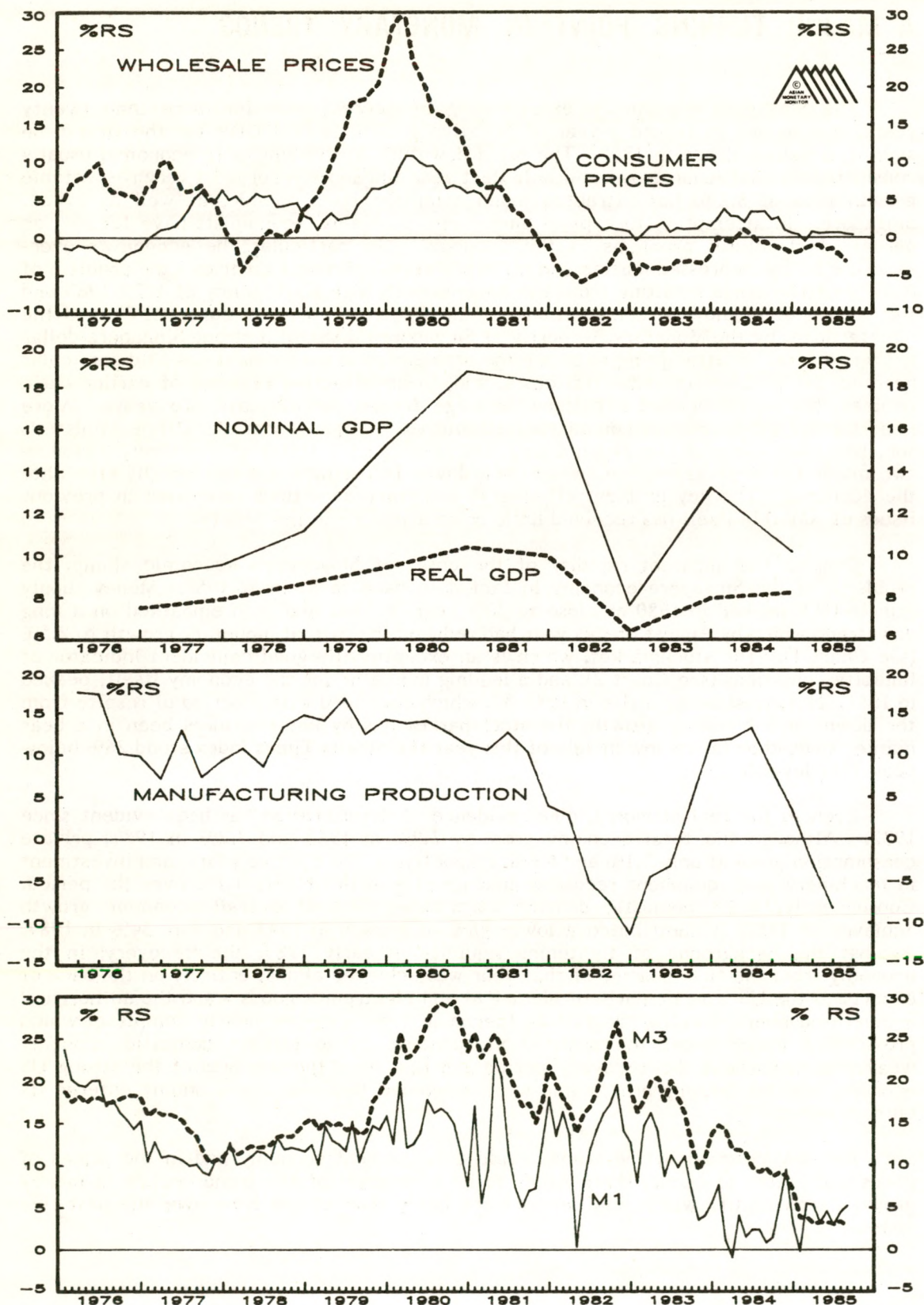
The Singapore economy is experiencing its poorest year for more than twenty years, looking set to record a year of negative growth in real GDP for the first time since full independence in 1965. The rapid downturn in the Singapore economy, usually considered an East Asian growth miracle (last year Singapore recorded a very respectable growth rate of 8.2%) has attracted much attention from outside, as well as inside, Singapore. In attempting to explain Singapore's problems, economists have focused on perceived structural problems in the economy - in particular the economy's over-exposure to the depressed marine and oil exploration/refining industries - the problem of high industrial costs resulting from the government's high wage policy of 1979-1983 and the burden of employers' contributions to the Central Provident Fund (CPF), and the maintenance, by the Monetary Authority of Singapore (MAS), of a strong Singapore dollar exchange rate. In attempting to tackle the problems, the government has paid particular heed to the problem of industrial costs, and, in an effective reversal of earlier basic policies, has recommended a nationwide wage freeze for at least two years. More importantly, the economic committee, established in April under the Prime Minister's son, Brigadier General Lee Hsien Loong has announced a series of measures, including two major fiscal packages, designed to help lower industrial costs and fiscally stimulate the economy. The key problem of adverse monetary conditions (discussed in previous issues of AMM) in itself has received little or no attention in the debate.

Despite the apparent rapidity of the onset of Singapore's economic slump, the problems of the Singapore economy in fact date back to at least 1981. Money supply growth (M3) peaked in 1980 at close to 30% year-on-year and then embarked on a long downtrend which by August of this year had reduced the rate of monetary growth to 2.5% (see Chart 1). The stockmarket, which is an exceptionally good coincident indicator of liquidity conditions (see Chart 2), and a leading indicator for the economy itself, peaked in 1981. Notwithstanding a rise in 1982-83, which coincided with a period of respite from the downtrend in money growth, the stockmarket has by key measures been in a bear market since then (at its low in July of this year the Straits Times Index stood 26% below peak 1981 levels).

Even in the real economy, clear evidence of deterioration has been evident since 1982. Although the total economy grew by 7.9% in 1983 and 8.2% in 1984, private consumption grew at only 7.1% and 4.6%, respectively, for the two years, and investment in machinery and equipment recorded annualised growth of only 1.7% over the period. Consequently, while domestic demand contributed 62% of overall economic growth achieved in 1982, it contributed a lower 48% of growth in 1983 and only 34% in 1984. Against the background of tightening liquidity in early 1983, the 'recovery' in the economy from the first quarter of that year was achieved almost entirely on the back of exports to the US - particularly of electrical and electronics goods - and the authorities' accelerated public housing programme (begun in 1983 and now nearly complete) which provided a major boost to construction spending. The private domestic economy weakened throughout the 'recovery' period and thus once the supports of the strong US economy and the housing programme were weakened this year the economy entered its current slump.

For any reversal in the trends evident in the real economy and in the prices of goods and assets to occur, there needs to be a reversal of the trend decline in money growth, a possibility which now seems more likely than at any time over the past five years.

SINGAPORE
CHART1: MONEY, OUTPUT AND PRICES



As discussed in previous issues of AMM (see particularly AMM Vol. 8 No. 4) the cause of the trend decline in money growth, and ultimately of Singapore's current economic problems, can be traced clearly to the growing contractionary influence of the public sector, which has a monetary surplus which grew larger at an increasingly rapid rate between 1980 and 1983 and has remained at high levels in 1984 and 1985. This monetary surplus, which results from the fiscal and other operations of the authorities, represents an increase in public sector deposits at the MAS and thus contributes directly to a decline in the monetary base. The MAS 'offsets', in a mechanical sense, the negative impact on the monetary base through its operations in foreign exchange (currency swaps, and direct intervention - outright sales of Singapore dollars). The MAS is unable to conduct open market operations in government debt because, as a result of the government's surplus, the non-bank private sector holds no government debt, but the MAS is able to conduct continuous purchases of foreign exchange because Singapore's private sector always has a large balance of payments surplus.

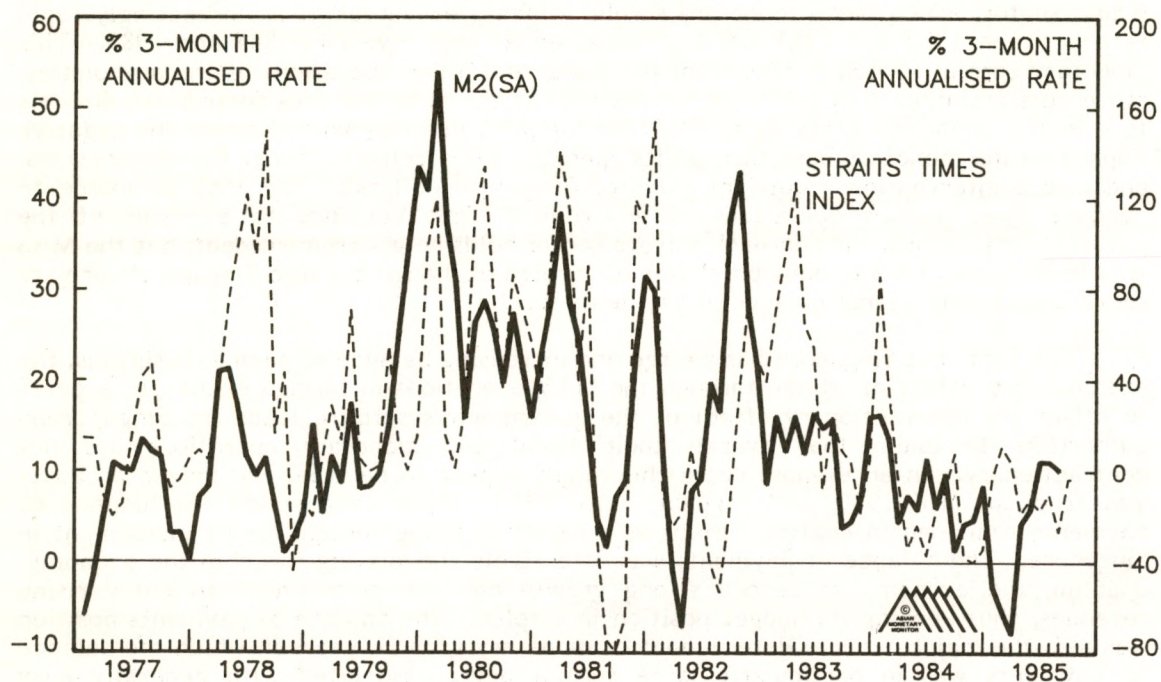
The fact that Singapore has a large and increasing balance of payments surplus, the expansionary effect of which, through the MAS' operations in foreign exchange, appears to offset the contractionary effect of the government's surplus, leads the Singaporean authorities to claim that overall their fiscal and monetary operations are not contractionary. In an ex-post sense this might appear to be true, and indeed probably was true up until 1980, and arguably until 1982. Over that period the balance of payments remained in healthy surplus as a result of rising foreign direct investment in Singapore. The balance of payments was effectively the 'driving force' in the economy, enabling the economy to record strong growth and the government to enjoy rising revenues, thus keeping its budget position in surplus. The balance of payments position was also the major cyclical determinant of monetary growth, years in which the balance of payments was in particularly large surplus being associated with generally easy liquidity conditions in the economy.

Over the 1980-82 period, however, the 'driving force' in monetary conditions in Singapore effectively switched to being the government's monetary surplus. The spiralling surplus - which soared from roughly S\$2.5 bn (10% of GDP) in 1980 to S\$5 bn (15% of GDP) in 1983 (see Chart 3) put constant downward pressure on the rate of monetary base and money supply growth. The balance of payments surplus also rose sharply over the 1980-84 period, but only because of and not independently of, the tightening liquidity conditions in the economy resulting from the growing monetary surplus of the authorities. This is clear from the balance of payments statistics themselves, where it is evident that since the beginning of 1983 the large and growing balance of payments surplus has been largely the result of monetary capital inflows, as opposed to direct or portfolio investment in Singapore. Indeed, without these huge monetary capital inflows - which are largely commercial bank borrowings from the Asian dollar market, necessitated and encouraged by tight liquidity conditions in Singapore - the balance of payments would have been in deficit in 1983 (see AMM Vol. 8 No. 1).

Thus since 1980, and particularly since 1983, rapidly growing government monetary surpluses have led to increasingly tight liquidity in the economy which, in turn, by encouraging large monetary capital inflows, has led to increasing balance of payments surpluses. Although, in an ex-post mechanical sense, the expansionary effect of the growing balance of payments surplus may then have appeared to largely offset the contractionary impact of the government, it is wrong to argue that the authorities as a whole (including the MAS) are not contractionary. The process by which the balance of payments surplus has been able to keep growing has involved tighter and tighter liquidity in the economy. At the beginning of the process is the government's rising monetary surplus. The circle is completed when the government uses its growing deposits at the MAS (the monetary surplus) to buy the MAS' growing foreign assets (which arise as a result of the balance of payments surplus), which are then managed by the Government of Singapore Investment Corporation.

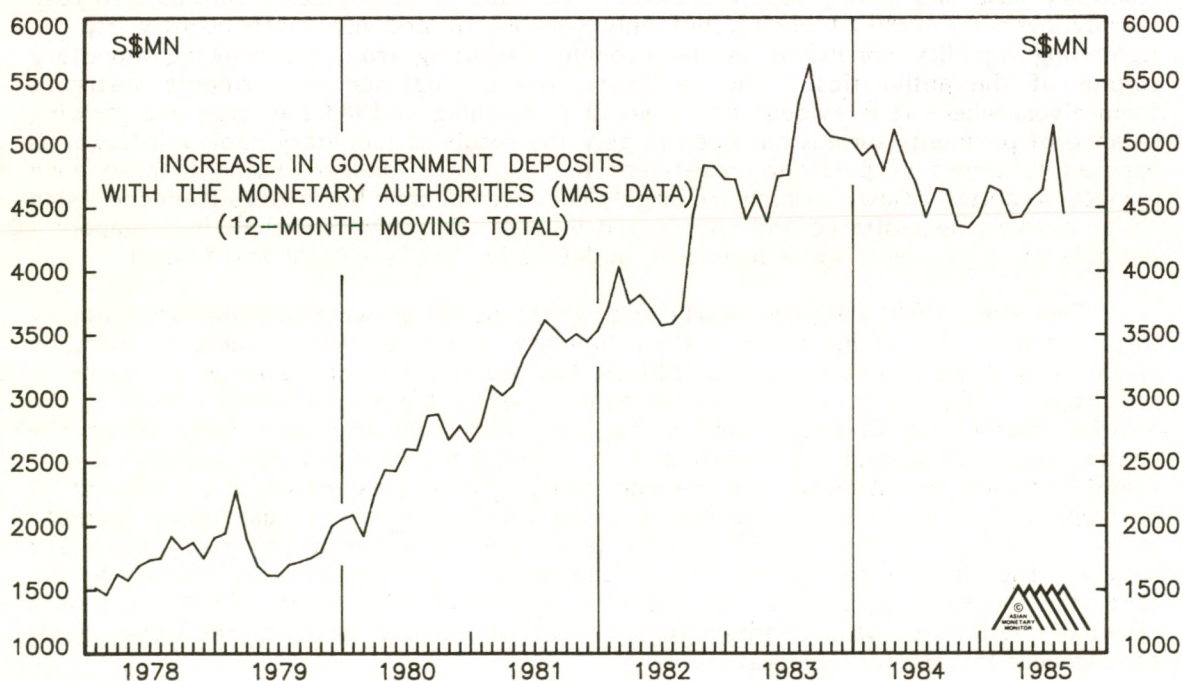
SINGAPORE

CHART 2: MONEY GROWTH AND THE STOCK MARKET



SINGAPORE

CHART 3: PUBLIC SECTOR MONETARY SURPLUS



There are three main elements in the public sector's monetary surplus - the actual fiscal surplus of the public sector (central government plus the statutory boards), the net contribution to the government's forced savings scheme - the CPF - and sales of government debt to financial institutions (which the financial institutions require to comply with statutory 'liquidity' ratios). All of these three main elements contributed to the growth of the public sector's monetary surplus over the 1980-83 period that is illustrated in Chart 3, although perhaps the key influence was the inflow into the Central Provident Fund. Over the 1980-84 period the total rate of contribution to the CPF was raised in successive annual stages from 37% of the employee's wage up to a maximum monthly contribution of S\$1,110 (effective from July 1, 1979) to 50% (25% from the employer and 25% from employee) up to a maximum monthly ceiling of S\$2,500 (effective from July 1, 1984). Consequently the gross inflow into the fund roughly doubled over the period - growing from S\$2.30 bn in 1980 (9% of GDP) to S\$5.39 bn in 1984 (14% of GDP). The net inflow (gross inflow minus total withdrawals) actually dropped sharply in 1984 to S\$1.88 bn, from S\$2.77 bn in 1983 (see Chart 4). However, the apparent beneficial effect of this drop in the net inflow for liquidity in the economy was illusory. The CPF net inflow dropped in 1984 because of a huge increase in withdrawals under the home ownership scheme for the purchase of public housing. Gross withdrawals for the purchase of Housing and Development Board (HDB) flats soared from S\$0.85 bn in 1983 to S\$2.37 bn in 1984. These funds were therefore only transferred from one part of the public sector (the CPF) to another part (the HDB) and had no positive influence on private sector liquidity. Thus, effectively, the drop in the CPF net inflow last year that is illustrated on Chart 4 only served to finance a much larger public sector fiscal surplus.

In previous issues of AMM we have derived an estimate for the public sector's contractionary impact on the monetary base from three different sources - in one method by looking at the expenditure/revenue side of the authorities' operations and totalling the three main elements of the public sector monetary surplus, and in a second method by looking at the monetary counterparts as shown in firstly, the MAS statistics (as used in Chart 3) and secondly, the IMF statistics. For 1984 the first approach results in a much higher estimate for the monetary surplus than the latter approach (see Table 1). It would appear that this is probably a result of the way HDB flat sales are accounted for in the public sector finance statistics.

In its financial year 1984/85 (April 1984-March 1985) the HDB enjoyed a huge jump in its revenues from flat sales, as a result of the completion and sale of more, and bigger, units - 61,257 flats as opposed to 42,000 units in the previous financial year. The value of flat sales jumped from 'only' S\$1.36 bn in 1983/84 to S\$4.72 bn in 1984/85, a rise which accounts for the bulk of the S\$4.04 bn jump in the total revenues of the statutory boards in 1984 (noted in AMM Vol. 9 No. 2), which in itself was wholly responsible for the large increase in the public sector fiscal surplus shown in Table 1. However, although the total value of flat sales appear to be counted as statutory board revenues in the public sector revenue and expenditure accounts, the HDB does not receive the total money value of flat sales in the actual year of sale. This is because the HDB itself provides the mortgages to individuals needing finance in addition to funds they have available from their accumulated CPF contributions. Thus, the S\$4.72 bn in public flat sales in the fiscal year 1984/85 was 41% financed through withdrawals from the CPF (S\$1.94 bn - representing the high level of CPF withdrawals referred to earlier on a calendar year basis) and 59% financed (S\$2.78 bn) through mortgage borrowing from the HDB itself. The monetary funds corresponding to this latter element - the mortgage finance - the HDB will only actually receive from the CPF over following years, as the mortgages are repaid with CPF funds. The funds have, however, already been included as revenues in the 1984 public sector revenue and expenditure accounts.

HOW THE GROWING PUBLIC SECTOR MONETARY SURPLUS LED TO TIGHTER LIQUIDITY 1980 - 84

STAGE 1

Flows		Balance Sheet of the MAS (inc. Board of Commissioners of Currency)	
		Assets	Liabilities
Public sector fiscal surplus		Foreign Exchange	Currency } Monetary ↓
+ Net inflow into the CPF			Bank Reserves } Base
+ Sales of govt. bonds to banks			Public Sector Deposits ↑
- Increase in govt. deposits at banks			Net worth & others
= Public sector monetary surplus			
= ↑ Public sector deposits at MAS			

The public sector fiscal surplus and the net inflow into the CPF lead to growing public sector deposits at the MAS. The counterpart to growing public sector deposits is falling bank reserves. The drain on bank reserves restricts banks' lending ability and tightens liquidity in the economy.

STAGE 2

		MAS	
		Assets	Liabilities
Current account		Foreign Exchange ↑	Currency } Monetary ↓↓
+ Non-monetary capital inflows			Bank Reserves } Base
+ Banks' net foreign borrowing			Public Sector Deposits ↑
= Balance of Payments surplus			Net worth & others
= ↑ MAS' foreign assets			

Tight liquidity encourages an inflow of funds into Singapore and also leads banks to raise their net foreign borrowing to fund domestic lending. The resultant balance of payments surplus means, under the managed exchange rate regime, an increase in foreign assets at the MAS and a corresponding rise in bank reserves, reversing the drop in reserves in stage 1.

STAGE 3

Govt. Balance Sheet (Stages 1 - 3)		MAS	
Assets	Liabilities	Assets	Liabilities
Foreign Exchange ↑	Net worth ↑	Foreign Exchange ↑↑	Currency } Monetary
S\$ deposits at MAS ↑↑			Bank Reserves } Base
			Public Sector Deposits ↑↑
			Net worth & others

The government uses its increased deposits at the MAS to buy foreign assets from the MAS. The MAS balance sheet is now left as it was before stage 1, but the government has larger foreign asset holdings and correspondingly greater net worth.

The fact that the MAS balance sheet is unchanged leads the authorities to claim that they are not contractionary. However, this ignores the fact that if the public sector monetary surplus is growing constantly (i.e. public sector deposits at the MAS are growing at an increasingly rapid rate) then, because of stages 1 and 2, liquidity will be kept constantly tight as the balance of payments surplus is forced to adjust continuously to the growing public sector monetary surplus.

TABLE 1

PUBLIC SECTOR'S CONTRACTIONARY IMPACT ON THE MONETARY BASE

Billions of Singapore Dollars

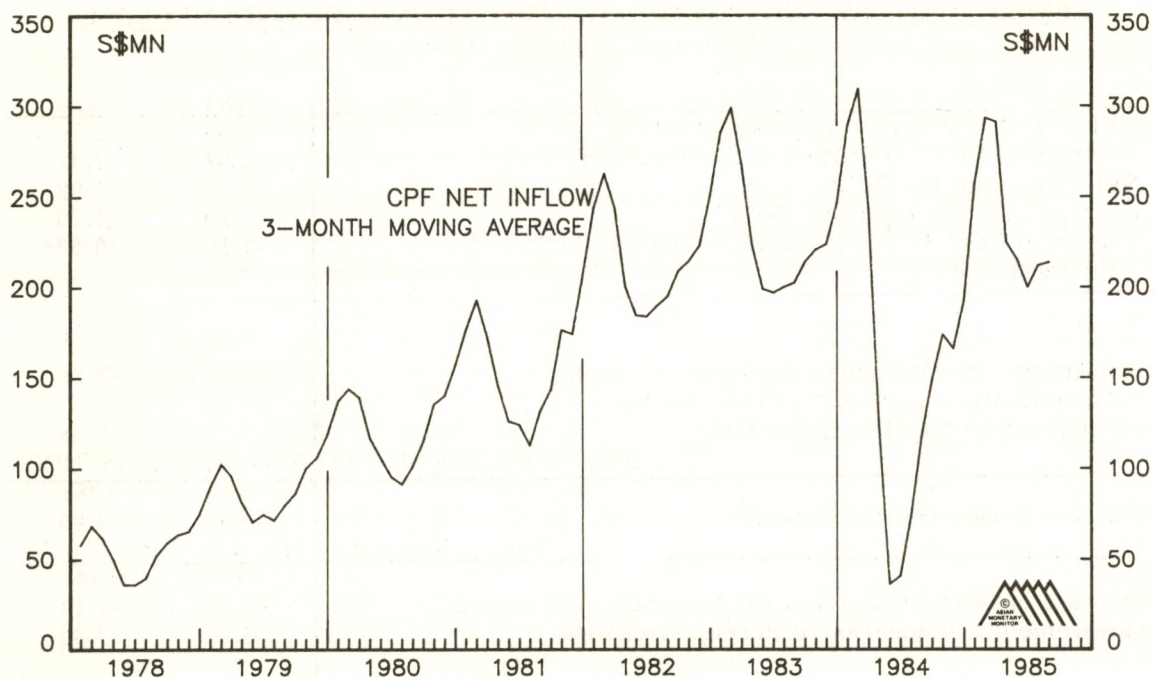
	1983	1984
(Official) Public Sector Surplus/Deficit (-)	-0.84	2.26
Adjustment for Contribution to Sinking Fund	2.07	2.37
Net Inflow into the C.P.F.	2.77	1.88
Increase in Other Domestic Debt	1.73	1.20
Change in Govt. Deposits with Commercial Banks (increase = -)	-1.10	-0.53
Total =	4.64	7.16
Adjustment for Mortgage Lending by the HDB	-0.91	-2.78
Adjusted Total = Increase in Public Sector Net Claims on the MAS (Estimate)	3.73	4.38
Source: Ministry of Trade & Industry, MAS, HDB		
	1983	1984
Increase in Government Deposits	5.02	4.45
Source: Monetary Formation Table (MAS)		
	1983	1984
Increase in Govt. Deposits at the Monetary Authorities	-2.83	-1.14
Government's Acquisition of Foreign Exchange	8.16	5.84
Total = Increase in Public Sector Net Claims on the MAS (Estimate)	5.33	4.70
Source: IMF		

These financing arrangements suggest that public sector revenues in the public sector revenue and expenditure accounts are probably overstated by roughly the value of HDB mortgage lending in each year. Adjusting for this factor - as is done in Table 1 - brings the estimate for the public sector's contractionary impact from the revenue/expenditure method of calculation closely into line with the monetary figures for 1984, but introduces a discrepancy for 1983. Importantly, it suggests that the public sector's contractionary impact in 1984 was not as great as appears at first sight, and may have been slightly lower than in 1983, although still at a very high level (11% of GDP and 17% of M2).

The analysis presented earlier suggests that the key to a trend improvement in liquidity conditions and in the economy is a gradual reduction in the public sector's monetary surplus which would enable the adverse liquidity cycle experienced during 1980-83 to move into reverse. A reduction in the government's contractionary impact would ultimately result in lower balance of payments surpluses, but would allow an easing in liquidity without any devaluation of the currency being necessary (the MAS is opposed to devaluation because it fears the possible adverse consequences for capital inflows). As explained earlier and as illustrated in Chart 3, it is true that some levelling out of the public sector's contractionary impact appears to have occurred over the last year or so, although as yet there has been no improvement in the monetary growth rate. The public sector's monetary surplus has a direct negative impact on the monetary base. As the other major determinant of the monetary base - the balance of payments surplus - has remained healthy, this suggests that part of the continued weakness in monetary growth this year may be explained by a fall in the monetary multiplier, or the ratio of the money supply to the monetary base. Chart 5 indicates that this may have been the case, as the money multiplier for the broad money supply - M3 - fell significantly during late 1984 and the early part of this year.

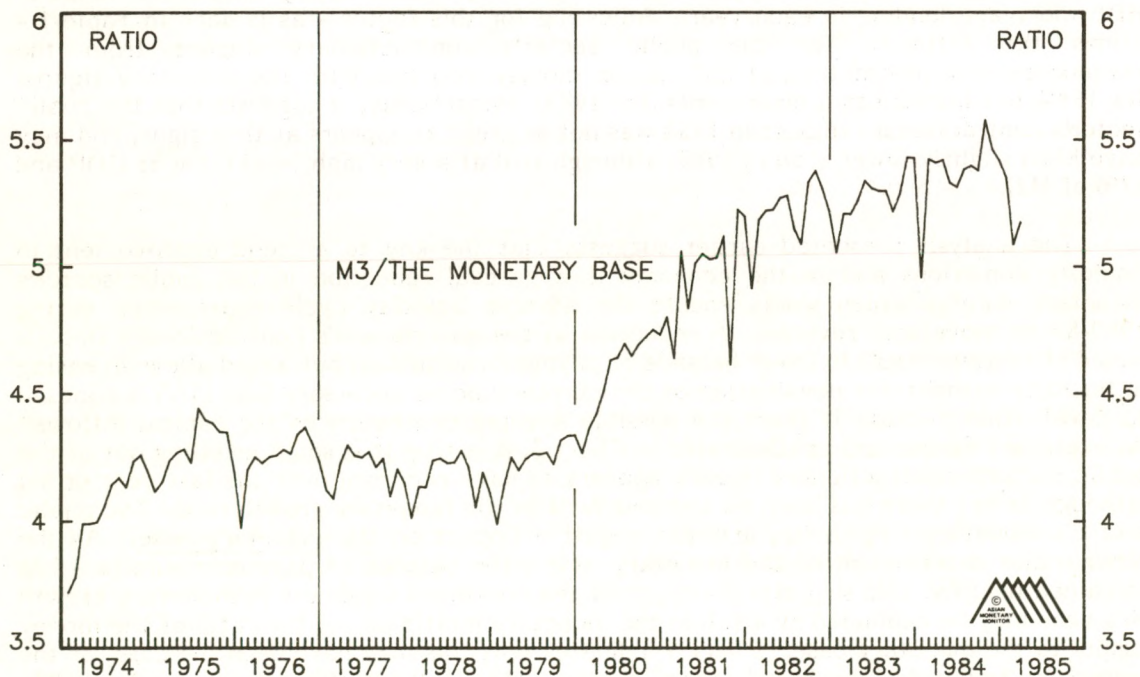
SINGAPORE

CHART 4: NET INFLOW INTO THE C.P.F.



SINGAPORE

CHART 5: THE MONETARY MULTIPLIER



Nevertheless, it seems likely that a significant reduction in the public sector's monetary surplus is necessary to promote a good pick-up in monetary growth, and herein lies a major reason for optimism with regard to the prospects for Singapore's economy and financial markets. The fact that the economy has finally begun to contract means that government revenues will now be tending to fall. This would not necessarily be encouraging if the authorities were continuing to take measures to increase their monetary surplus (i.e. by further raising CPF contribution rates). However, it would appear that they have now ceased following this policy and are in fact taking active measures to further reduce the size of the surplus through two routes - measures to encourage greater withdrawals, for different purposes, from the CPF, and the fiscal packages introduced by the economic committee.

The CPF measures taken so far have been announced in two packages. The first, announced in July, relaxed the CPF rules for investment in properties. Measures which became effective immediately allow individuals to use the entire balance in their CPF Ordinary Account for the purchase of one or more private residential properties (this is not applicable to HDB home owners), and shortened the time bar on the re-use of CPF savings after the sale of a CPF-financed property from three years to one year. Also it was announced that when the CPF Act is amended individuals will be allowed to invest their CPF funds in non-residential properties, or use CPF funds to redeem outstanding loans on these properties. Previously, the Approved Residential Properties Scheme of the CPF allowed the use of only up to 90% of the Ordinary Account balance for the purchase of only one residential property. In the second package, at the end of October, the government announced that when the CPF Act is amended, individuals will also be allowed to invest 10% of their CPF balance above a minimum reserve of S\$30,000 in gold or in publicly listed shares classified as 'trustee stocks' i.e. shares of companies incorporated in Singapore which have a minimum paid-up capital of S\$5 million and which have paid dividends for each of the last five years. At the moment, other than for property purchase, CPF funds can only be withdrawn for the purchases of shares in the Singapore Bus Service Ltd. (SBS) and for certain medical expenses.

The likely impact of the new CPF measures on the net inflow into the fund, and hence upon liquidity in the economy, is difficult to assess. The relaxation of the rules concerning investment in properties may be not that significant. Since the Approved Residential Properties Scheme (ARPS) was introduced in 1981, a cumulative total of S\$1.67 bn (by August of this year) has been withdrawn from the CPF for the purchase of private homes, and there are already indications from 1985 data that the number of members withdrawing funds for the first time for this purpose has peaked. It is difficult to see how the relaxation of the CPF rules to cover purchase of a second home will lead to significantly higher total withdrawals from the fund, although the raising of the ceiling to up to 100% of each member's Ordinary Account balance should encourage withdrawals under the ARPS to be maintained at close to current levels, as existing mortgages on residential property are repaid with CPF funds.

More important for the longer term are the measures to take effect when the CPF Act is amended, particularly those concerning share purchases. As at 31st December 1984, 293,688 CPF members had balances in excess of S\$30,000 to their credit, and are thus potentially eligible for the share purchase scheme (although these balances are inclusive of amounts already tied up in flats/houses and SBS shares). The total of CPF balances to the credit of these members totals S\$19.36 bn, or S\$10.55 bn in excess of the total of these members' minimum reserve balances under the scheme ($293,688 \times 30,000 = 8.81$ bn; 19.36 bn - 8.81 bn = 10.55 bn). Using the 10% ratio applicable under the scheme for investment in equities, suggests that a maximum of S\$1.055 bn would potentially be available for this purpose (the actual amount would be somewhat less because of funds already tied up in property). However, most estimates place the amount likely to be withdrawn initially at not much over S\$300 million, or barely enough to offset the negative effect on liquidity of the forthcoming floatation of Singapore Airlines (which involves the sale of S\$250 million worth of equity locally). The real value of the scheme

is likely to emerge in the longer term, when the scheme will tend to have a self-reinforcing positive effect on liquidity trends. As liquidity, the economy and the stockmarket improve, then more funds are likely to be withdrawn from the CPF for share purchases, thus further aiding liquidity. In the short-term, as the stockmarket remains fairly flat and the CPF continues to pay a good return of 6 1/2%, the incentive to withdraw funds for share purchase may be not that great.

For the short-term, the fiscal packages introduced by the economic committee are a more significant positive factor. The packages have included reductions in a number of statutory board charges, rebates on property taxes, lower fuel taxes, and a variety of other measures officially totalling S\$1.025 bn on an annualised basis in net loss of public sector revenue.

The first fiscal package, announced by Brigadier General Lee in July, totalled S\$450 million, made up of S\$120 million worth of reductions in statutory board charges - of the Port of Singapore Authority, the Telecommunications Authority of Singapore, the Jurong Town Corporation, the HDB and the Civil Aviation Authority of Singapore - a two year freeze on government land sales for commercial, residential and industrial use, the establishment of a S\$100 million venture capital fund and reduced rates on loans to small business by the Economic Development Board, the speeding up of some public sector infrastructural projects and a 30% rebate in property tax (which stands at 23% of annual rental value) for owner-occupied industrial and commercial properties to last for 18 months.

In the second fiscal package, announced at the end of August, the property tax rebate was extended to owners of rented industrial and commercial properties, and to owners of vacant land or land being developed. The remaining elements of the package, officially worth S\$400 million, were a reversion of the duty on petrol to the 50% rate it stood at before the March budget (from the 60% it had been raised to in the budget), the abolition of the duty on fuel oil, and the cancellation of the proposed S\$6,600 annual diesel tax on taxis, which has now been put at S\$1,100.

Independently, a reduction in the charges of the Public Utilities Board, worth S\$175 million, was announced at the end of October. The surcharge on the rates on electricity and gas were abolished, and the rates on electricity and gas were reduced.

The actual reduction in the public sector's monetary surplus (as shown in Chart 3) resulting from these packages will be considerably less than the S\$1.025 bn official total value of the packages. This is partly because the 'public sector monetary surplus' is defined as solely the negative impact of the public sector's operations on the monetary base or, in other words, the increase in public sector deposits at the MAS. Any increase in public sector deposits at the commercial banks does not have any effect on the monetary base (as it does not change the balance sheet of the MAS) and therefore has no negative impact on liquidity. Thus, in Table 1, the build-up of public sector deposits at the commercial banks is subtracted from the three main elements of the public sector's surplus to give the overall public sector contractionary impact on the monetary base shown in Chart 3. Most public sector deposits at the commercial banks are held by the statutory boards as they usually prefer to hold deposits at the banks, where they can often earn a higher return, rather than at the MAS. The extent to which the build-up of statutory board deposits is reduced as a result of the fiscal packages will therefore not aid overall liquidity in the economy (i.e. increase the rate of growth of bank deposits) but merely tend to transfer ownership of commercial bank deposits from the public to the private sector. Thus, the roughly S\$300 million worth of reductions in statutory board charges in the fiscal packages should be largely excluded when analysing the monetary effects of the packages.

Secondly, the revenue losses referred to in the packages refer to public sector revenue lost compared with projections in the FY 1985/86 budget, not compared with the

actual public sector position last year. Thus, in the second fiscal package, the reductions in petrol tax and the taxi diesel tax do not represent 'real' revenue losses to the government, particularly the taxi diesel tax which had not actually been implemented when the second fiscal package was announced.

Taking these factors together, the fiscal packages in themselves probably represent a monetary stimulus of closer to S\$500 million than the S\$1.025 bn announced as the net revenue loss to the government. This is, nevertheless, still a significant sum at a time when public sector revenues are already falling as a result of the contraction in the economy.

In total, the combination of the contracting economy, the fiscal packages and the relaxation of the CPF rules should be expected to lead to a reduction in the public sector monetary surplus in the magnitude of S\$1 bn - to roughly S\$3.5 bn - over the next year or so. Assuming that the monetary multiplier stabilises, this should be enough to allow a good recovery in the rate of monetary growth from current levels. This is particularly so given that the balance of payments surplus - which tends to lag trends in liquidity - remains very healthy. At S\$1.9 bn for the first half of this year, the announced balance of payments surplus is now roughly equivalent in magnitude to the public sector monetary surplus for the first time in seven years.

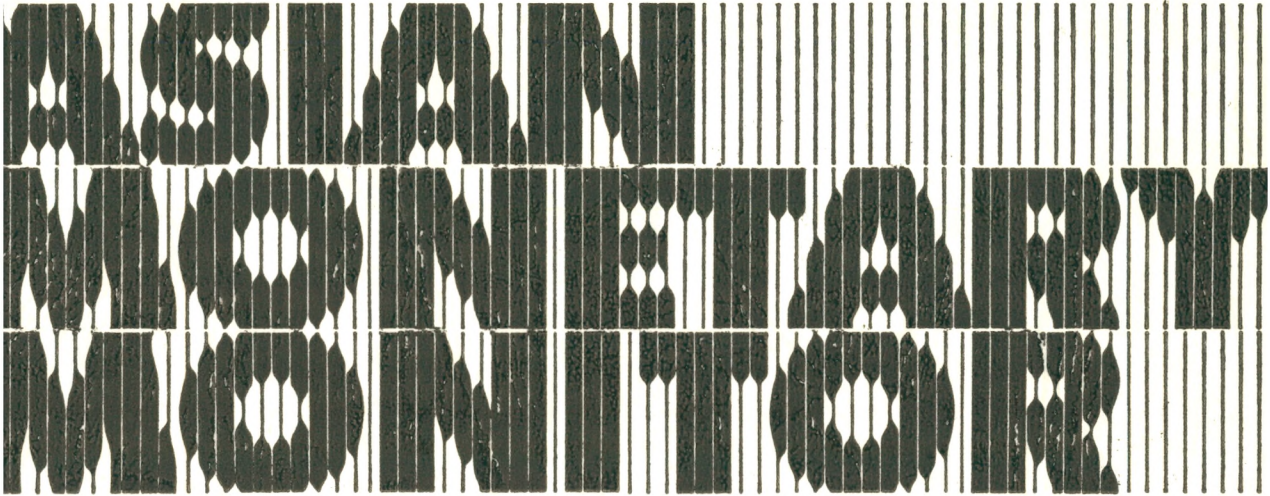
For an upward trend in money supply growth to continue beyond the next year might need new measures from the government to further reduce its monetary surplus. The economic committee have debated the option of cutting corporate income tax rates, and it still seems likely that a tax cut will be included in the March 1986 budget. A 10% cut in corporate income tax - which would cost the government roughly S\$600 million in lost revenue - would be more significant, in a monetary sense, than the total of the fiscal measures announced so far. A major factor inhibiting a large tax cut is the desire of the government to keep its expenditures fully covered by tax revenues. As long as the government continue to adhere to this policy then there will effectively tend to be a lower 'floor' to the public sector monetary surplus of around S\$3 bn i.e. roughly the value of sales of government debt to the CPF (equivalent to the CPF net inflow) and to other financial institutions. Again, however, proposals reportedly under consideration within the government to change the system under which the CPF currently invests its total net inflow in government debt, with a view to encouraging the growth of a secondary market in government debt, might alter this situation. It will be necessary to see what proposals, if any, are eventually implemented.

FORECAST: A major turning point in liquidity trends is taking place in Singapore. The public sector's monetary surplus, which has acted as the major drain on liquidity in Singapore's economy over the last five years, is finally being reduced as a result of a contraction in the economy and government measures to cut public sector revenues and encourage further withdrawals from the CPF. The necessary conditions already appear in place to allow a good recovery in money supply growth over the next year, and further measures the authorities are still likely to take e.g. tax cuts, could extend the recovery in liquidity well beyond a year. Improving liquidity conditions are likely to trigger a recovery in the domestic economy - which has been weak for three years - sooner than is generally expected by most observers.



ASIAN MONETARY MONITOR

is published by
Asian Monetary Monitor Ltd.,
P.O. Box 12964, G.P.O.,
Hong Kong.



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Asian Monetary Monitor is a bimonthly publication specialising in the analysis of economies along the Asian Pacific Rim. Sold by subscription only, price US\$200 p.a. inclusive of air mail delivery to any part of the world. Correspondence and subscriptions should be addressed to The Editor, Asian Monetary Monitor Ltd., P. O. Box 12964, G.P.O., Hong Kong.

EDITOR:

John G. Greenwood

M.A. (Hons) Econ. Edinburgh
Research Economist, University of Tokyo
Economist at G.T. Management (Asia) Ltd.

**CONTRIBUTING
EDITORS:**

Hugh P. Sloane

B.A. Econ. Bristol
M. Phil. Econ. Oxford
Economist at G.T. Management (Asia) Ltd.

Tim J. Lee

B.A. Econ. Cambridge
Economist at G.T. Management (Asia) Ltd.

**CHARTS AND
STATISTICS:**

S.Y. Chan

Michael Wong

ADMINISTRATION:

Isabella Ling

Asian Monetary Monitor is published in

association with the



group of companies

ASIAN MONETARY MONITOR

Nov. - Dec. 1985

Vol. 9 No. 6

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KEY TO SYMBOLS USED IN THE CHARTS

% RP - Percentage Rate of change over Preceding period.

% RS - Percentage Rate of change over Same period of preceding year.

SA - Seasonally Adjusted.

SAAR - Seasonally Adjusted at Annualised Rate.

REGIONAL SURVEY

THE UPS AND DOWNS OF ASIAN EXPORTS IN THE CURRENT BUSINESS CYCLE

Economic activity within the Asian region accelerated rapidly during 1983 until mid-1984, stimulated by the upswing in the US business cycle from its trough in 1982. Nevertheless, following the initial acceleration in Asia there was subsequently an abrupt decline starting in the fourth quarter of 1984, and affecting both Japan and the rest of Asia. Since the first quarter of 1985 Japan has seen some recovery in its exports to the United States, but this has not been the case for most other East Asian economies as their exports have persisted roughly at the levels reached in early 1984, without enjoying any further growth.

To explain these observations Section 1 provides a bird's eye view of the growth rates of exports from four East Asian economies (Japan, Hong Kong, S. Korea and Taiwan) over the past decade, incorporating in particular the two major business cycle upswings (1975-76 and 1983-84) and their aftermaths (the Japanese and German mini-recessions of 1977, and the US mid-course correction of 1984-85). The four economies are primarily manufacturing economies, with minimal exports of commodities or raw materials, but each highly dependent on exports to the USA. Section 2 highlights the special importance of the US economy in this upswing by examining the relative export performance of Asian economies in that market, using data showing the changes in the geographical sources of US imports, as well as changes in their composition by commodity item.

Section 1: Exports of 4 Asian Economies and the Global Business Cycle, 1970-1985

Chart 1 shows the quarterly year-to-year growth rates of the exports of the four most dynamic and important manufacturing and trading economies of East Asia. For the purposes of comparison all data have been converted to US dollars at the relevant contemporary exchange rates.

Among these four economies, the fluctuations of Hong Kong's export growth best mirror the world business cycle. This is not only on account of Hong Kong's highly external orientation, but also because Hong Kong's primary trading partner throughout the past decade has been the United States, and it is basically the US economy which determines the global business cycle. Chart 1 shows that following the recession of 1974, Hong Kong's exports in US dollar terms soared from the fourth quarter of 1975, peaking at a growth rate of over 50% p.a. in mid-1976. Thereafter there was a significant pause in the growth rate from the first quarter of 1977 until the first quarter of 1978, followed by a renewed surge from mid-1978 through to mid-1980, when the impact of the mini-recession in the US that year began to have its effect on Hong Kong. Although the domestic US economy recovered in 1980-81 the recovery was too brief to stimulate any sustained upturn in Hong Kong exports, so the downturn in export growth continued uninterrupted until the first quarter of 1983, by which time the US economy was gathering steam again.

The upturn in Hong Kong's export growth this time (in 1983-84) was somewhat less dramatic than the upsurge of 1975-76, but none the less impressive since the US dollar, to which the Hong Kong currency was linked from October 1983, was rising strongly on world currency markets. However, once again the export-led expansion was short-lived. Export growth peaked at something over 30% on a year-to-year basis by early 1984, and already by the fourth quarter of 1984 the growth rate was starting to plunge. In March 1985 the growth rate of domestic exports actually turned negative, and remained negative at about -10% in US\$ terms for the rest of the year. By comparison with the interim export slowdown of 1977-78 during the last cycle, the interim slowdown in Hong Kong's exports in 1985 has been more severe in degree, and it may yet turn out to be of longer duration.

CHART 1
EXPORTS OF FOUR EAST ASIAN ECONOMIES (IN US\$)

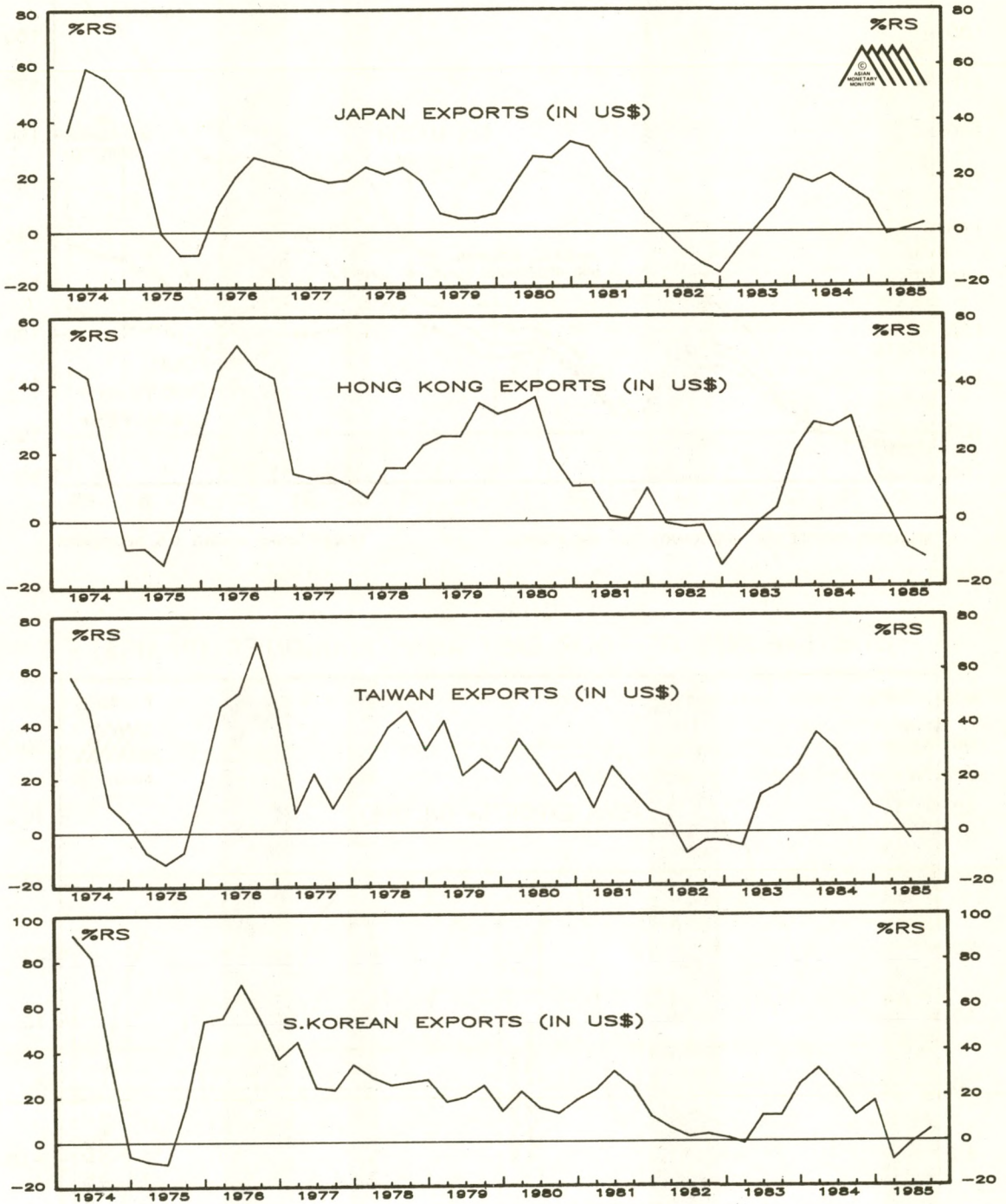


CHART 2: THE GLOBAL BUSINESS CYCLE
INDUSTRIAL PRODUCTION IN SIX MAJOR COUNTRIES

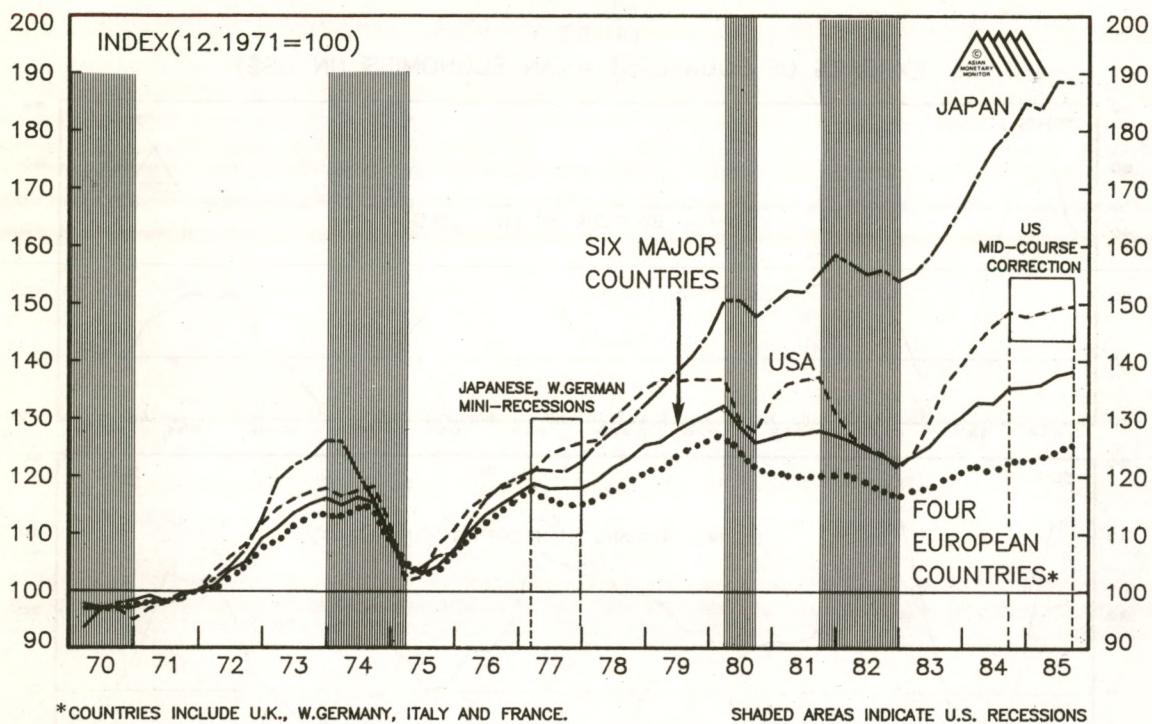
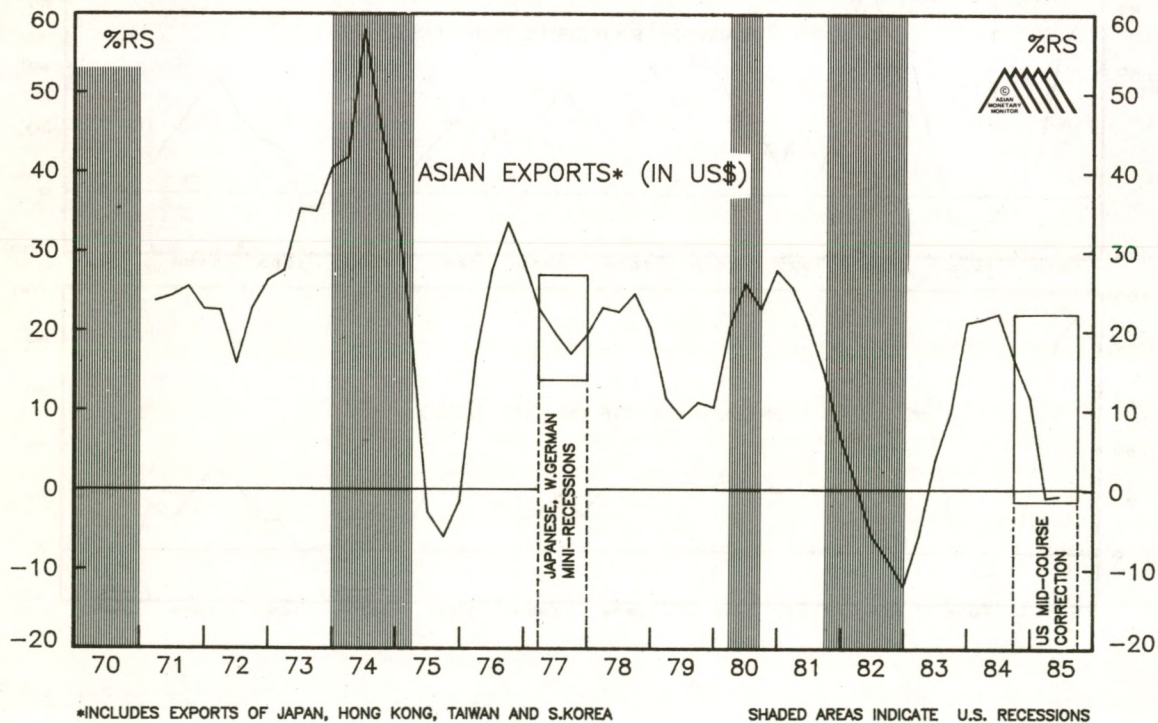


CHART 3
TOTAL EXPORTS OF FOUR EAST ASIAN ECONOMIES (IN US\$)



There are three main reasons for the greater severity of the export slowdown this time, all of which apply in some degree to the other three Asian economies. First, the slowdown in the US itself has been more significant in this cycle. In the 1977-78 period it was Japan, W. Germany and other continental economies which engineered a mini-recession - primarily to reduce further their inflation rates which in 1976 were still uncomfortably high (NB. The floating exchange rates of the mid-1970s gave the authorities in these countries the opportunity for the first time to pursue an independent monetary policy) - whereas in the current period it is the US which has engineered a "mid-course correction". Japan, W. Germany and others whose inflation is already very low have had no need to engineer a mid-course correction while the US had to arrange at least a mild correction in order to slow the economy after its immensely strong start in 1983. Since the US is also the largest trading partner of all four East Asian economies the effects have been more far-reaching this time. Second, the fact that most of the Asian economies (except Japan) maintained their currencies closely linked to the US dollar meant that as the dollar rose in 1983-84 and up to March 1985, each of them gradually found it more difficult to sell goods to Europe, Japan, the UK or elsewhere as their own currencies rose with the US dollar. Third, the drastic slowdown in the growth of the Chinese economy from early 1985 has affected both Hong Kong and Japan, and to a lesser degree S. Korea and Taiwan, each of which sell to the P.R.C. through intermediate agents located in Hong Kong and elsewhere.

The differences between the export performance of Hong Kong and the other three economies over the decade are clearly significant, and can mainly be explained by differential exchange rate changes in each case. For example in the case of Japan, the slowdown of exports in 1977 was milder, but there was a distinctive deceleration in 1979 mainly as a result of rise in the yen in 1977-78. Thereafter from 1980 to 1984 the general pattern is very similar to that of Hong Kong. In the case of Taiwan the general profile of export growth has been very similar to that of Hong Kong, except that Taiwan's exports recovered more quickly in 1978 - perhaps because the NT\$ was pegged to the weak US dollar - and Taiwan did not enjoy the surge in exports that Hong Kong experienced in 1979-80. Subsequently Taiwan has closely conformed to the growth pattern of the other three Asian economies shown in Chart 1. In the case of Korea the Won was devalued at the end of 1974 and then held steady against the US dollar until 1980, so that relative to the Yen, DM and continental currencies it was weak in line with the US dollar through 1977-78. Korean exports therefore expanded more in line with Taiwan's in 1975-76, and continued to grow strongly albeit on a slowing growth trend until 1980. From 1980 the Korean Won was managed on a downward slide against the US dollar, depreciating by 35% between December 1979 and December 1982, which probably explains why Korea's exports remained competitive and continued to grow through most of the 1981-82 recession. Since the start of the US recovery in 1983 Korea's exports have closely followed the pattern of the other Asian economies.

Chart 2 shows the four US business expansions of 1971-73, 1975-80, the short-lived upturn of 1980-81, and the current upswing dating from the beginning of 1983. The chart also records the two interim slowdowns during the course of the 1975-80 expansion and during the current expansion. Chart 3 shows the growth of the arithmetic sum in US\$ of the export data for the four individual Asian economies recorded in Chart 1, and extends the time period back to include the 1971-73 expansion.

A study of Charts 2 and 3 clearly shows that the global inflationary boom of 1971-73 had a most dramatic effect on the exports of the four Asian economies with exports in US\$ terms peaking at 57% in the second quarter of 1974, only to slump to -6% in the third quarter of 1975. The recovery of 1975-76 saw exports of the four countries peak at

CHART 4
U.S. REAL GNP GROWTH

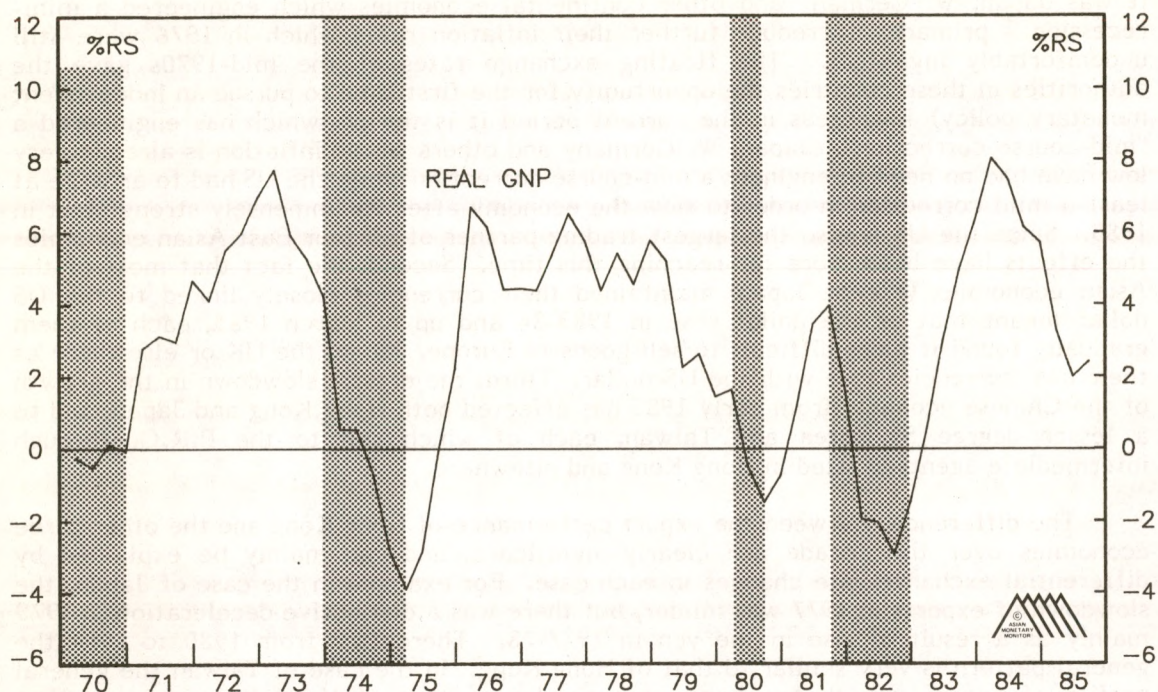
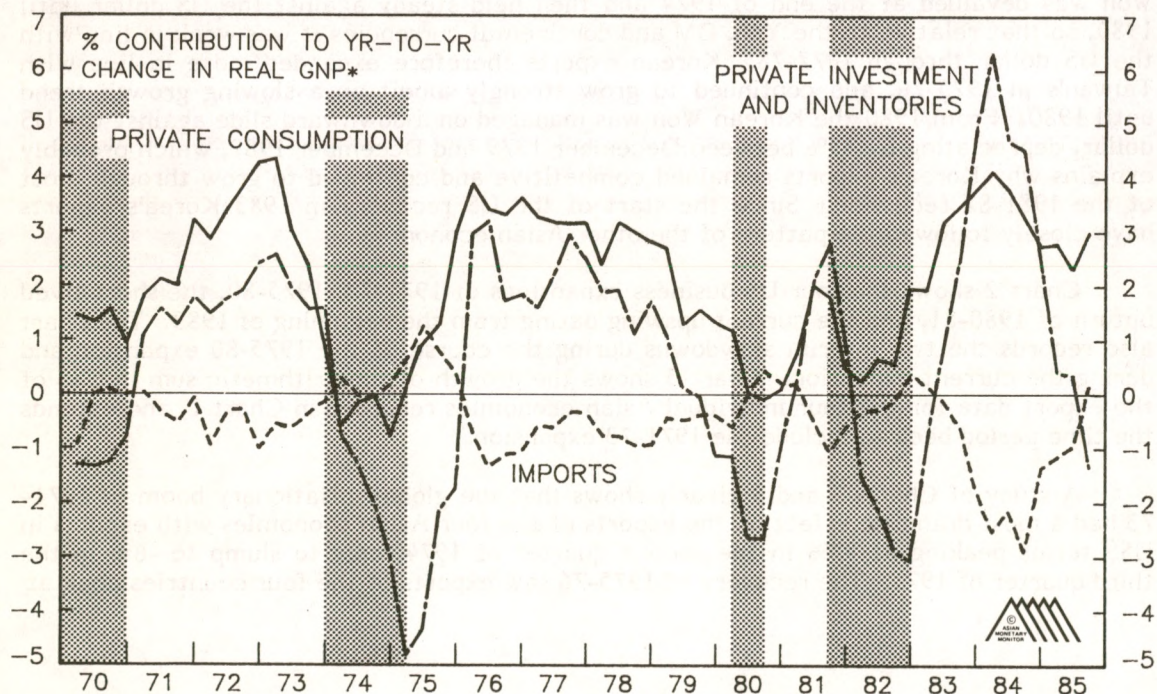


CHART 5
COMPONENTS OF U.S. REAL GNP GROWTH



*Measured as change in GNP component divided by total real GNP one year earlier.
N.B. Chart excludes government expenditures and exports.

34% in the third quarter of 1976. The subsequent interim slowdowns of W. Germany and Japan in 1977 show up as a distinct deceleration of export growth for the whole area, rather than as an actual downturn - in marked contrast to the impact of the US deceleration in 1985. Japan's export slowdown of 1979 is more significant, but still only a deceleration rather than an absolute decline. The temporary US revival in 1980-81 (Chart 2) evidently had some impact on Japan and S. Korea (see again Chart 1), but it was not enough to restore export growth from Hong Kong or Taiwan, so that for Asian exports as a whole there was a continuous deceleration from the beginning of 1981 to the end of 1982 (Chart 3).

The global recession of 1981-82 produced a longer and deeper downturn in Asian exports than the recession of 1974-75, but the subsequent upswing of Asian exports in 1983-84 was similar in overall profile to the export upswing of 1975-76, even though one would normally expect a deeper recession to result in a stronger rebound. However, as explained for the individual case of Hong Kong, the downturn in Asian exports in 1984-85 resulting from the US mid-course correction has been substantially worse than the interim downturn of 1977. The next section looks in more detail at the role of the US in the present downturn of Asian exports.

Section 2: Asian Exports and the Structure of US Domestic Demand During the Current Business Expansion, 1983-85

As mentioned in Section 1, the US economy accounts for the greater part of exports from Asia, and this is the basic reason why the deceleration of the US economy in the past two years has had such a serious impact on Asian exporters. In the case of Hong Kong, the US accounted for 44% of total exports in 1984, and in the case of Japan the share of exports to the US was even greater, leaping to 56% of total exports in the same year. The Asian economies are linked to the US economy through the components of US final demand, their exports mainly going into US consumption and investment spending. Therefore, to understand the experiences of these Asian economies it is necessary to examine them in relation to changes in the composition of US GNP.

Chart 4 shows the dramatic upturn in US overall real GNP in 1983-84 and its subsequent slowdown, while Chart 5 shows how the consumption and investment components of demand rose similarly, the rise in investment being especially marked following the enactment in 1982 of accelerated depreciation allowances. As explained in Section 1, the general upswing-downswing pattern for Asian economies' exports has been broadly similar during the current US expansion. Measured from the standpoint of US GNP the surge in imports from Asia and elsewhere shows up in the downward or negative plunge in imports in 1984 (Chart 5) because increased imports detract from spending on domestic product. However, following the exceptionally favourable conditions of 1983-84, Asian economies have been unable to avoid a contraction in exports following the slackening in US growth which took place after the first quarter of 1984. The suddenness and severity of the downturn have proved a major disappointment to Asian economies. Tables 1 and 2 document some of the forecasts made for Asian exports and Asian real GNP growth in early 1985, as well as the latest likely outcome. A simple unweighted average of the forecasts for exports was for growth of +9.7%, whereas the average of the likely outcomes as at December 1985 is down by -1.1%. Similarly for real GNP growth in these export-led economies, against initial unweighted average forecasts of 6.5% real growth in 1985, the likely outcome will be almost halved to just 3.5%.

TABLE 1

ASIA'S EXPORT SLOWDOWN IN 1985...

	Total Export Growth in 1984	Forecast of Export Growth for 1985 (as at start of 1985)	Likely Outcome for Export Growth in 1985 (as at December 1985)
Japan	15.7%	7.5%	0.9%
Hong Kong	37.8%	18.0%	5.1%
Korea	13.5%	13.5%	2.1%
Taiwan	20.6%	11.7%	-1.1%
Singapore	10.1%	N/A	-4.3%
Malaysia	19.3%	5.5%	-6.4%
Thailand	16.4%	2.2%	-4.3%
Unweighted Average	19.0%	9.7%	-1.1%

Note: All figures in US\$ terms.

TABLE 2

...CAUSES DISAPPOINTMENTS IN GNP GROWTH

	Real GNP in 1984	Initial Forecast of 1985 Real GNP (at the start of 1985)	Likely Outcome for Real GNP (as at December 1985)
Japan	5.7%	5.3%	4.5%
Hong Kong	9.4%	7.2%	4.5%
Korea	7.9%	6.8%	3.7%
Taiwan	10.5%	8.5%	5.0%
Singapore	7.9%	6.0%	-2.0%
Malaysia	7.3%	6.7%	5.2%
Thailand	6.0%	4.8%	3.8%
Unweighted Average	7.8%	6.5%	3.5%

Chart 6a shows indices of the levels of US imports from different regions of the world. It is clear that during the 1983-85 upswing there has been a continuation - in broad terms - of the trend of rapid export growth for Asian exports (i.e. growth in US imports from Asia), which was evident over the 1975-77 cycle (see Chart 6b). Asia as a whole has again performed better than all other areas. However, the downturn of the curve in 6a during the fourth quarter of 1984 is a direct result of the abrupt change in tempo of US consumption and investment spending. Also, whereas in 1976-77 the downturns in US purchases of Asian, Latin American and European imports were dispersed through different quarters, in the current cycle imports from all these three regions declined simultaneously in the one disastrous fourth quarter of 1984. Although there are obvious similarities between the 1982-85 upswing and the 1975-77 cycle, there are also significant changes in the geographical composition of US imports. Compared to the 1975-77 period it is evident that Europe has performed much better in the current upswing. This change could indicate some alteration in the type of goods that are imported by the US and thus a shifting of the demand curve for Asian exports, but it may simply reflect the relative weakness of European currencies - particularly the pound and the DM - compared to some Asian currencies (excluding the yen), several of which have been linked to the rising US dollar during the current cycle.

A glance at Chart 7a which separates out the Japanese and non-Japanese components of Asian exports to the US supports these observations. It is clear that whereas the NICs and other Asian countries far outperformed Japan in the 1975-77 upswing, exactly the reverse has occurred during this cycle. Compared to 1975, when Japan accounted for 41.6% of US imports from Asia, Japan today (1984/5) accounts for 49.2% of US imports from Asia. Aside from the different product mix sold by Japan and other Asian countries, much of the difference in the two periods must be explained by the relative strength of the yen in 1976-77, and by its relative undervaluation in 1983-85. Closer consideration of Chart 5a shows the gap between Japan and the rest of Asia widening after 1984, with Japan steadily gaining increasing preponderance in total trade. To explain this we need to consider the composition of US imports by commodity item and relate this to the changes in the components of US domestic demand.

Charts 8a and 8b present the composition of US imports by major commodity items in the 1983-85 and 1975-77 upswings. Note that US imports of 'automobiles and parts' have accelerated (especially rapidly since the end of 1984 when quotas on Japanese auto imports were relaxed), and the 'machinery' category has recorded exceptional growth over the cycle. The sharp upswing in these two items since the end of 1984 almost certainly explains the surge in Japanese exports in the first quarter of 1985 (see Chart 7a), when automobile and machinery exports both accelerated. In a similar fashion, the slackening of Japan's growth in the second quarter of 1985 (in Chart 7a) is related to the tailing off of machinery exports (in Chart 8a). Japanese machinery exports are directly related to the US investment cycle which as we saw earlier has experienced such a sharp upswing and downswing, while 'autos and parts' are probably more related to US personal consumption. Although the fluctuation in personal consumption has been of a much narrower range it is nevertheless worth noting that the boom up to the second quarter of 1984 and the downturn in the third and fourth quarters was virtually synchronous with US consumer spending. The surge in 1985 is out of line with slowing personal consumption and could therefore indicate simply the temporary effect of the lifting of Japan's auto quotas.

With the appreciation of the yen and the ending of any temporary effect from the lifting of auto quotas, it would be reasonable to expect some further slowdown in Japanese exports to the United States. Despite quality advantages and market share, there must occur some setback as profit margins are squeezed. For example, the move towards the export of knockdown sets in auto production is partly a response to increasing protectionist sentiment in the US, but it is also a rational response to pressure on pricing. Japanese exports to the US have also become more concentrated in product terms, which should accentuate any slowdown due to alterations in the terms of trade.

CHART 6A US IMPORTS BY REGION, 1983-85

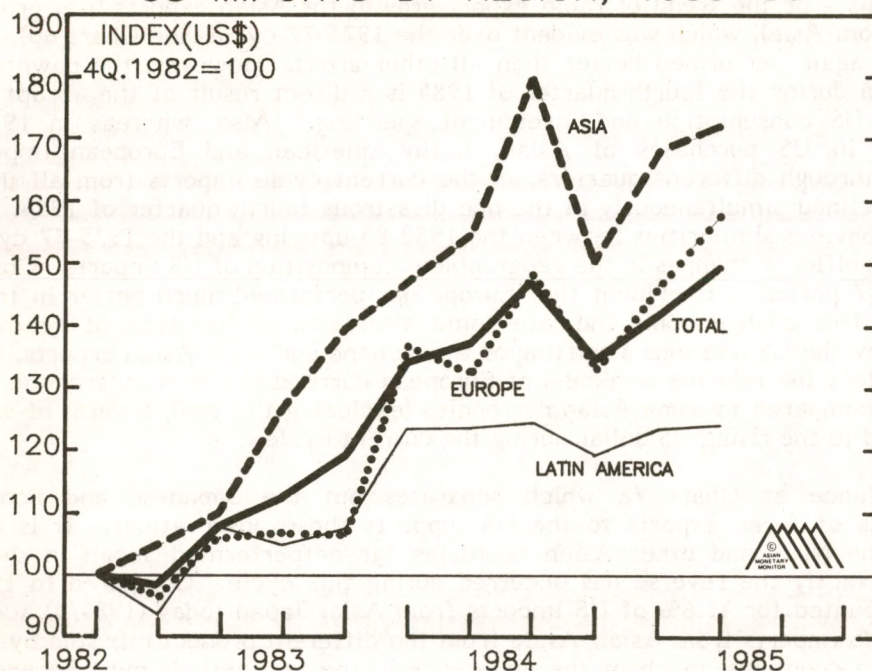


CHART 6B US IMPORTS BY REGION, 1975-77

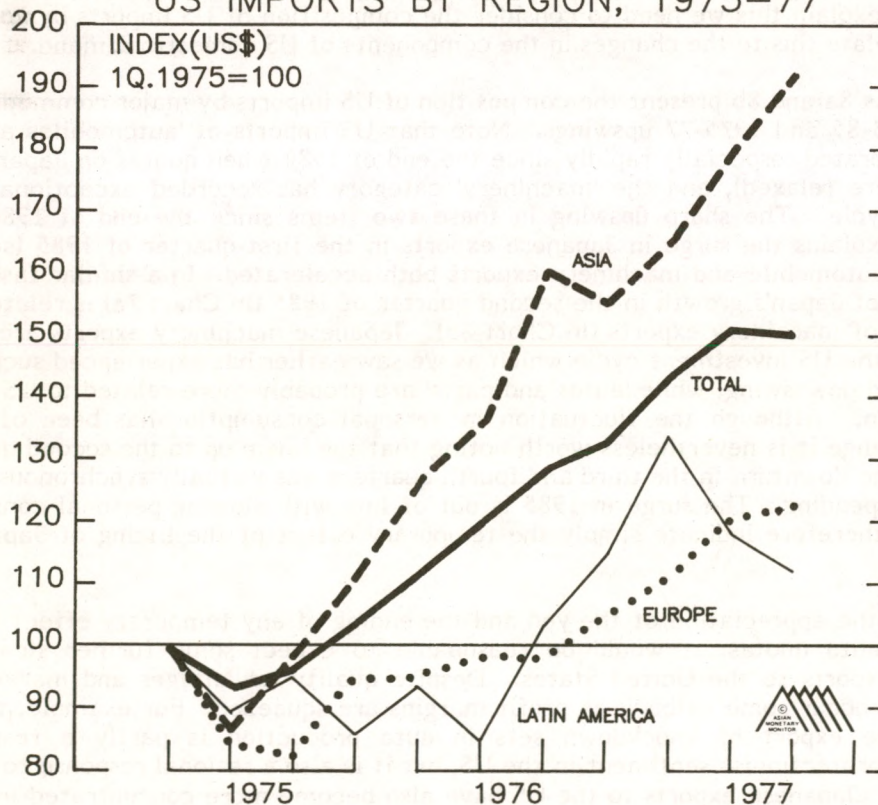


CHART 7A
US IMPORTS FROM ASIA, 1983-85

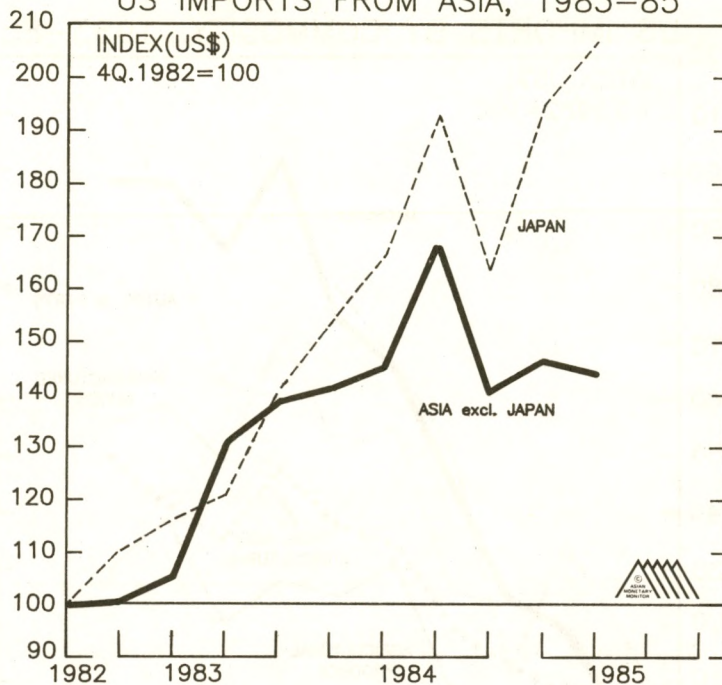


CHART 7B
US IMPORTS FROM ASIA, 1975-77

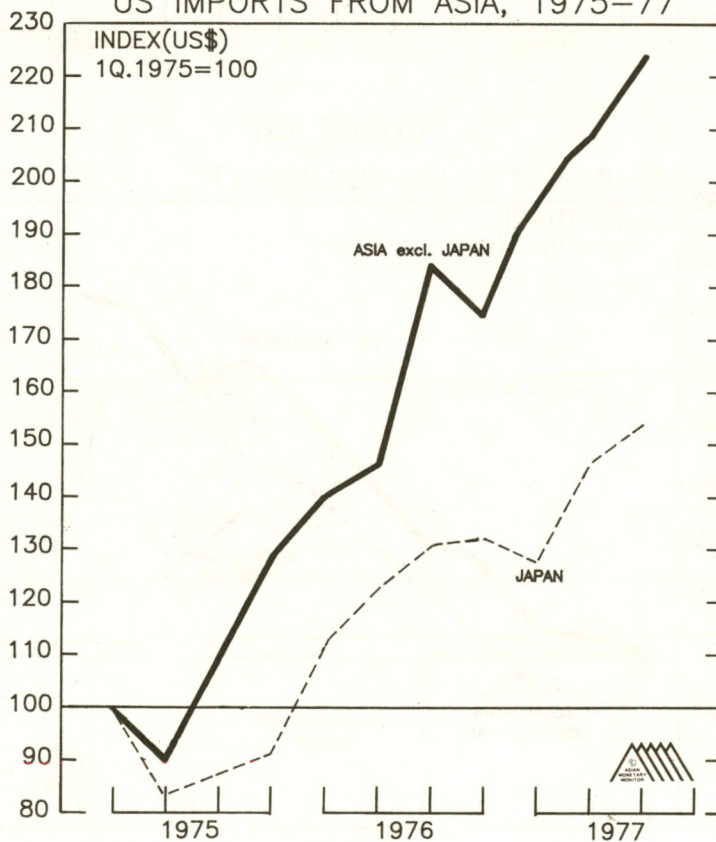


CHART 8A
US IMPORTS BY COMMODITY, 1983-85

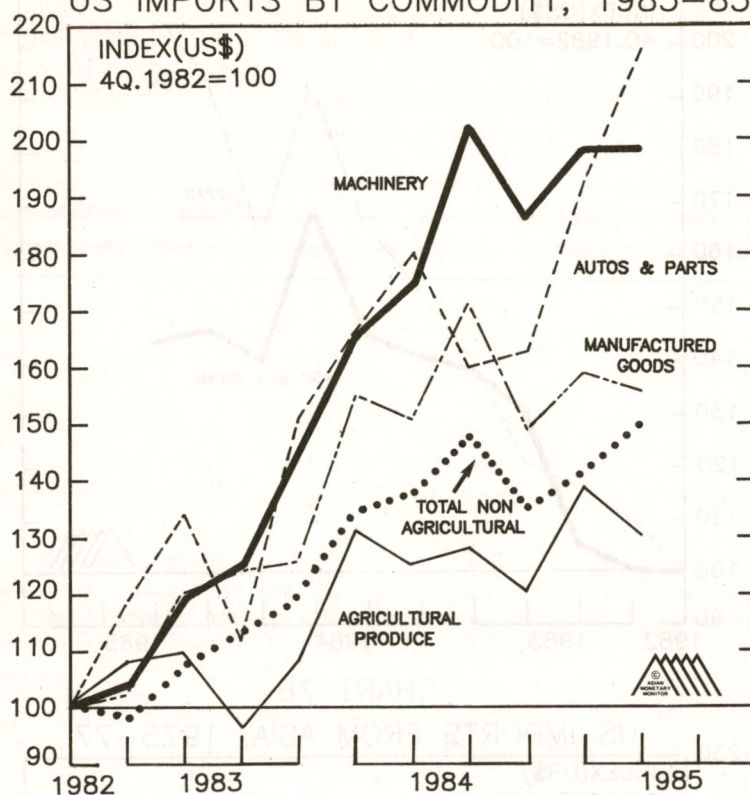
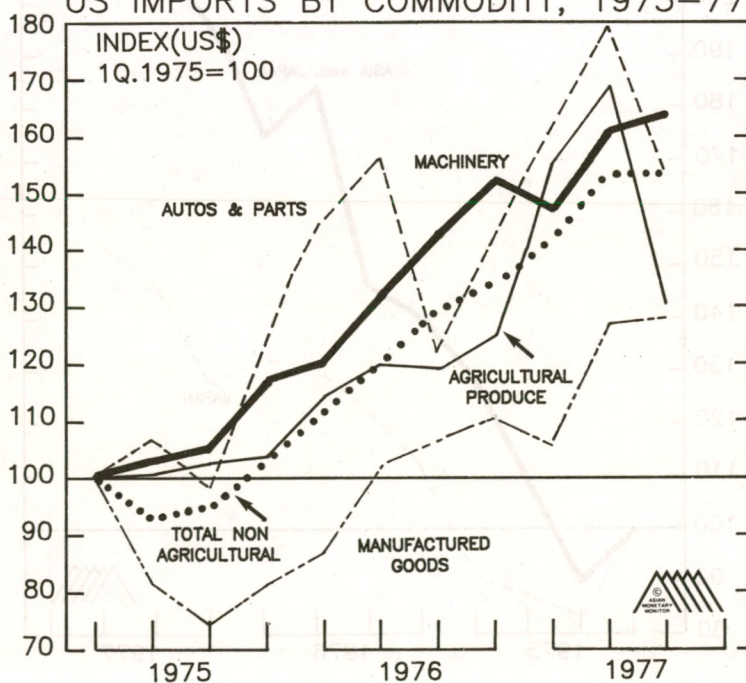


CHART 8B
US IMPORTS BY COMMODITY, 1975-77



The emphasis has shifted from 'unfinished' machinery to finished goods e.g. consumer durables, numerical control devices and transport machinery. This realignment leaves Japan more vulnerable to changes in demand in the US since capital spending has already slowed dramatically, and it looks as if the boom which has occurred in the demand for some products e.g. VTRs, may already have passed. Equally, Japan's exports to the US will be acutely sensitive on the upside to any upturn in US demand, and to any reduction in protectionist sentiment.

FORECAST: The manufacturing economies of Asia are acutely dependent upon the state of the US business cycle. Over this past decade this has been clearly illustrated by the general pattern of fluctuations in export growth from Asian economies. While the advent of floating exchange rates has created some variability in response, especially for Japanese export performance, this has probably been offset by the increasing dependence of Asian economies on the US market. The interdependence has been heightened by increasing concentration (in the case of Japan, for example) on the export of machinery or components which are in turn related to the volatile capital goods cycle of the US economy.

The 1975-80 business expansion in the US and the distinctive slowdown of 1977 have some parallels both in the extended global business expansion since late 1982 and in the 1984-85 mid-course correction in the US. Just as Asian export growth was able to recover in 1978 and in 1980-81, the next two years should see some export recovery, especially for those economies such as Hong Kong and Taiwan whose currencies are closely linked to the falling US dollar, and for Korea whose currency has typically been managed so as to remain slightly weaker than the US dollar. Japanese exports will clearly face a much more difficult challenge at the new post G-5 levels of the yen, and much will depend on whether the yen appreciates from current (200-205) levels against the US\$, but if the US achieves 4% real growth in 1986 or 1987, Japanese exports could see a significant revival based on the sharp upswing in US investment spending which 4% growth would necessarily imply.

MALAYSIA

INCREASING RELIANCE ON OIL TO MAINTAIN ECONOMIC EXPANSION

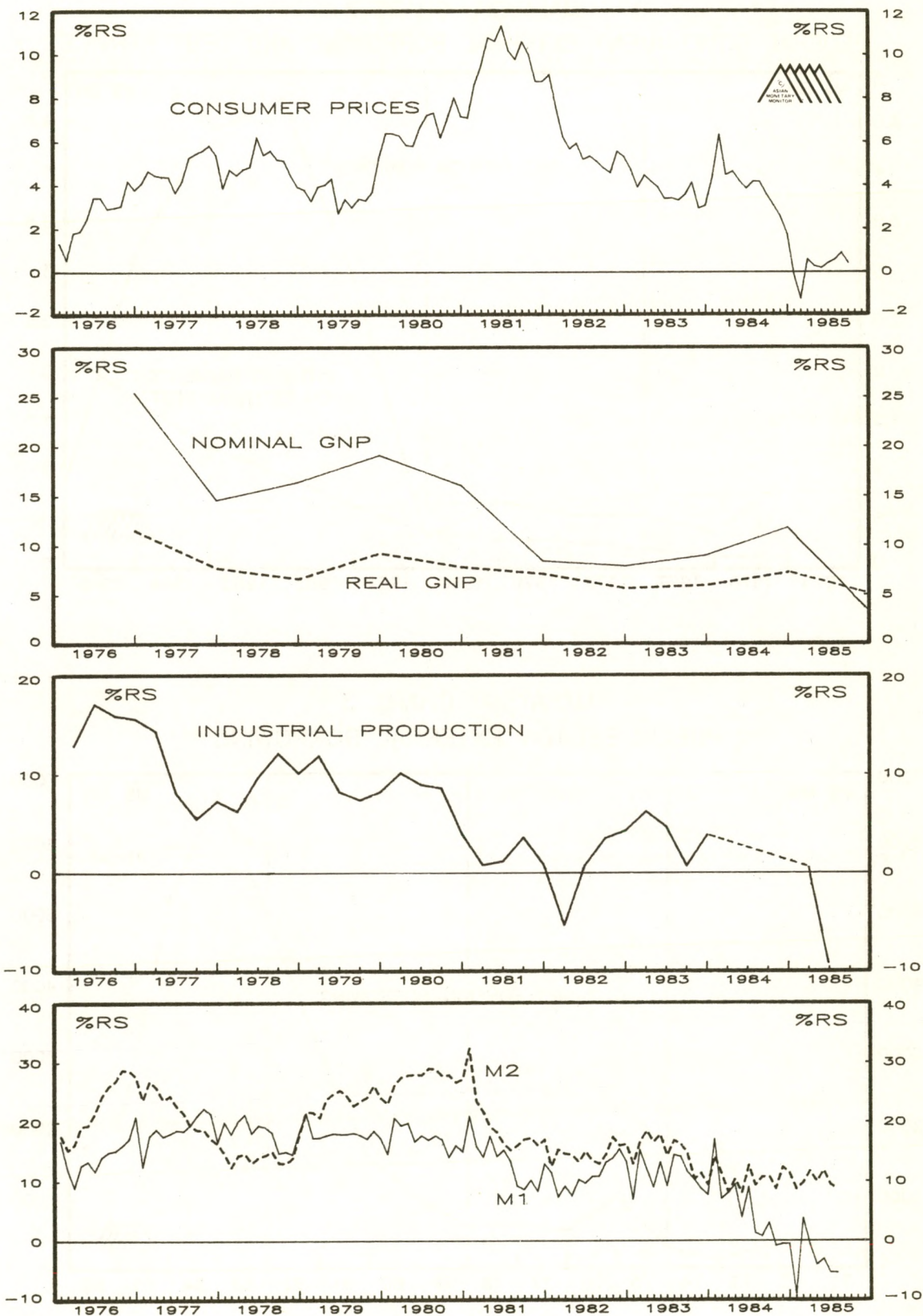
Our last article on Malaysia (AMM Vol. 9 No. 3) highlighted the pressures on liquidity which were continuing to build as a result of the Malaysian government's determined efforts to reduce its dependence on foreign borrowing, exacerbated by the continuing weakness in the prices of Malaysia's commodity exports. The Ministry of Finance (MOF) Economic Report, released with the October 25th budget for 1986, contains the first comprehensive set of economic and financial estimates for 1985 with forecasts for 1986, and allows a more detailed analysis of the impact of those pressures and the prospects for the Malaysian economy next year.

Given the economic background and the prevailing view that liquidity conditions in Malaysia have been 'tight', it is perhaps surprising that the figures presented in the 1985 'Economic Report' seem to indicate an apparent lack of external and domestic constraints to the growth of the monetary base in 1985. Under Malaysia's closely managed exchange rate regime, the major influence on monetary conditions is the state of the overall balance of payments. The trade balance is estimated by the Ministry of Finance to have been in large surplus of M\$5.788 bn, not very much below 1984's upwardly revised record surplus of M\$6.913 bn (although it must be said that this comparatively high estimate for the trade surplus appears to have been based on what in retrospect can be seen to have been overly optimistic assumptions for commodity prices (e.g. tin, palm oil, rubber) in the second half of the year, and will therefore probably be revised downwards in subsequent data releases). More surprising, and more important in the make-up of the overall balance of payments position, is the considerable improvement estimated in net non-trade foreign exchange earnings. The overall balance of payments position is seen as having improved to a near-record surplus of M\$1.72 bn in 1985, up from M\$312 million in 1984 which, given the M\$1.125 bn deterioration in the trade account, implies a M\$2.533 bn improvement in net non-trade foreign exchange earnings.

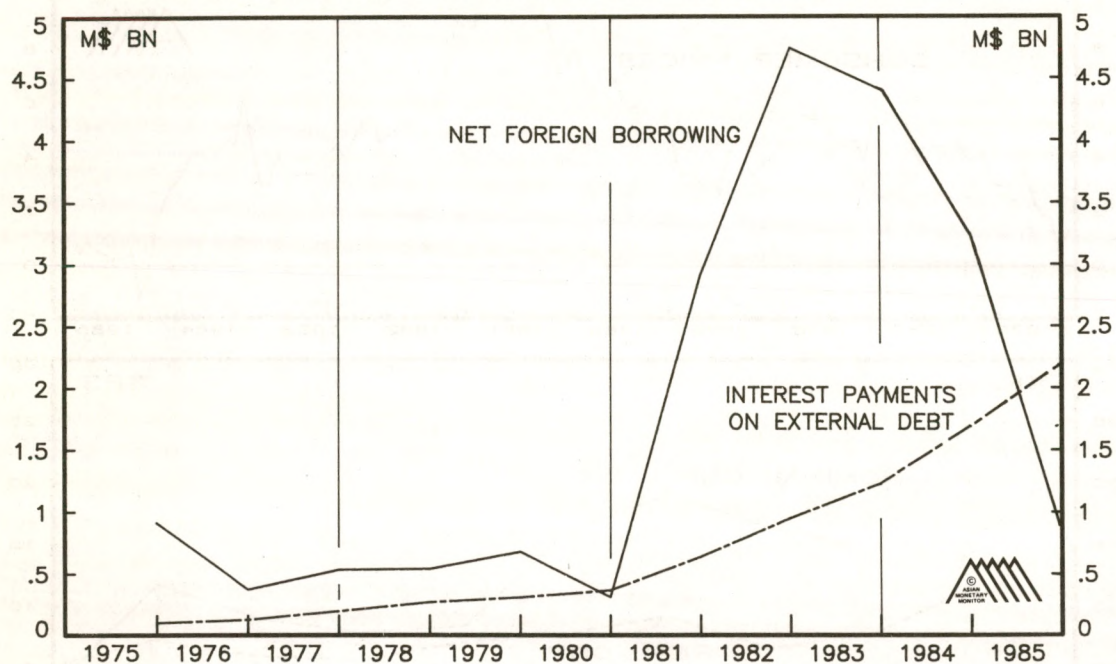
As has been discussed in previous AMM articles (see, for instance, AMM Vol. 8 No. 5, and AMM Vol. 9 No. 3) the single most important element in the profile of Malaysia's non-trade foreign exchange earnings is the government's external financing position. Over the last three years the overall balance of payments has been increasingly adversely affected by the government's, albeit commendable, efforts to reduce its net external borrowings (which constitute capital inflows on the balance of payments) at a time when its external debt servicing requirement (representing a negative item on the services, or 'invisibles', account of the balance of payments) is still rising. Chart 2 shows that the external finance position with regard to the Federal Government worsened considerably in this respect in 1985. As the chart indicates, interest payments on Federal Government external debt rose sharply above Federal Government net new foreign borrowings in 1985, meaning that for the first time the Federal Government's overall external financing position constituted an absolute negative (of about M\$1.3 bn) - i.e. the difference between the two lines on Chart 2 - in the balance of payments accounts.

This position is not changed significantly by extending the definition of government to include the state governments, public authorities and off-budget agencies (OBAs), as well as the Federal Government, as is done in Chart 3, which shows a greater drop in consolidated public sector net foreign borrowings, reflecting some reduction in the net foreign borrowings of the OBAs (interest payments on external debt are not published on a consolidated public sector basis).

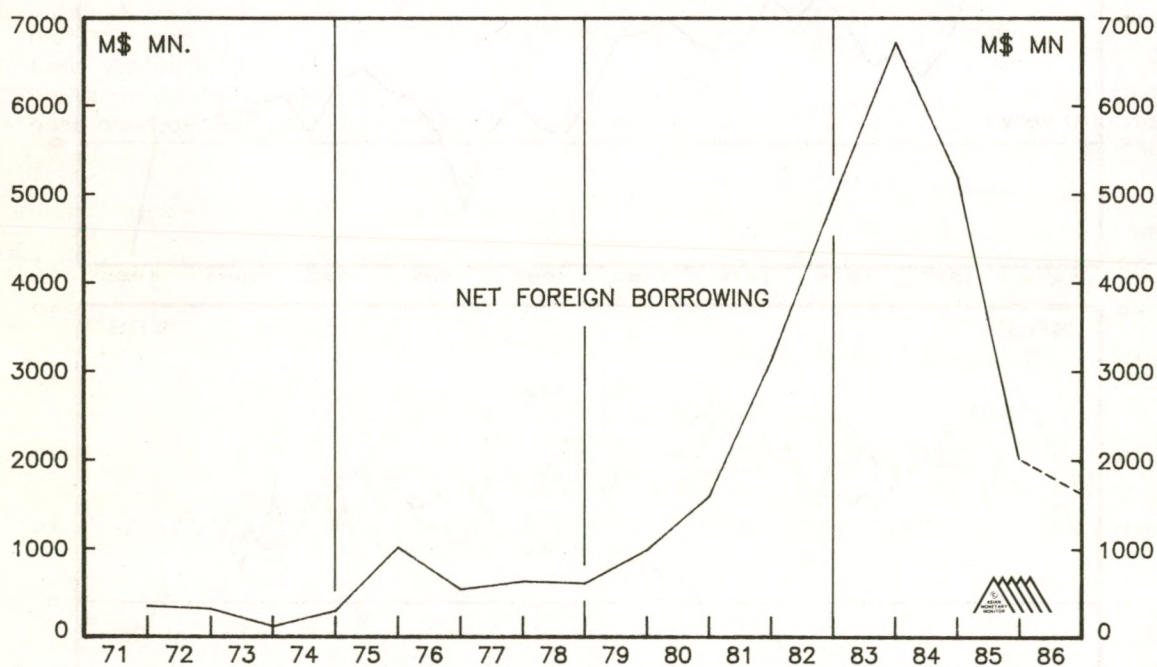
MALAYSIA
CHART 1: MONEY, OUTPUT AND PRICES



MALAYSIA: CHART 2
FEDERAL GOVERNMENT EXTERNAL BORROWING AND DEBT SERVICE



MALAYSIA: CHART 3
PUBLIC SECTOR EXTERNAL BORROWING



The M\$3.17 bn drop in consolidated public sector net foreign borrowing (which usually forms the bulk of net inflows on the long term capital account) makes the M\$2.98 bn estimated improvement in overall net capital inflows in 1985 difficult to explain. The most important element in the discrepancy is undoubtedly capital inflows resulting from the repatriation of funds previously held offshore by Petronas, the national oil corporation. Petronas is usually subject to the same exchange control regulations as the private sector and hence cannot normally leave funds amassed from oil revenues offshore. However, for a brief period in the mid-1970's Petronas was exempted from these regulations and was able to accumulate significant offshore funds, which this year have been repatriated by a decision of the Cabinet. Repatriation of Petronas' offshore funds has been partly aimed at supporting the balance of payments and liquidity conditions in the economy, but is also probably connected with the re-financing of Petronas' 'bail-out' of Bank Bumiputra Malaysia Berhad in September 1984 (see below, and box). Any change in Petronas' net external financial assets is usually accounted for in the 'other private financial capital transactions' item in the detailed balance of payments accounts released by Bank Negara Malaysia (BNM). In the much less detailed preliminary figures given in the MOF 'Economic Report', all private financial capital transactions (including commercial banks, merchant banks and finance companies) are consolidated in one item - Private Capital (net) - but the estimated surplus on this account appears to imply a capital inflow resulting from repatriation of funds by Petronas in the region of roughly M\$2 bn.

Other items which help to partly explain the surprisingly high MOF estimate for overall net capital inflows in 1985 are a stated M\$560 million increase in foreign corporate investment, largely in the oil and gas sector, and some increase - roughly M\$300 million - in private sector net foreign borrowings (both items are private long term capital inflows), as well as a revaluation of international reserves (of about M\$700 million - M\$800 million, included in the 'Errors, omissions and other short term capital' account). However, even including these items still leaves roughly M\$2.5 bn of the MOF's estimate for the improvement in net capital inflows to explain, and it appears that there may be some inconsistencies between the figures for public sector finance and the balance of payments which may be corrected in later estimates - possibly resulting in a lower estimate for the overall balance of payments surplus.

Nevertheless, it is still difficult to argue that the balance of payments position exerted pressure on liquidity in 1985. With the domestic sources of monetary base growth (i.e. those resulting from government and Bank Negara Malaysia (BNM) policy actions) very expansionary, liquidity conditions in Malaysia cannot be judged to have been particularly tight over this past year.

During 1985, the authorities took a number of overtly expansionary moves, the most obvious of which was the April 15th reduction in commercial banks' reserve requirements, from 5% to 4% (discussed in AMM Vol. 9 No. 3). BNM also effected substantial liquidity injections by transferring part of its holdings of government deposits to the commercial banks. Such an action results directly in an increase in the monetary base because commercial banks are credited with the value of the deposits transferred to them from the BNM by means of credits to their reserve accounts at the BNM. Between January and July of 1985 Federal and State Government fixed deposits at the commercial banks rose by M\$1.58 bn and by July such deposits stood M\$2.63 bn higher than at the same time in the previous year. Another fiscally-related way in which the authorities aided liquidity conditions during the course of the year was via the government speeding up payments to contractors for services provided to the public sector.

Turning to the monetary figures themselves, however, it can be seen from Chart 1 that M1 growth did turn markedly negative in 1985 (latest figures available are for July). BNM attributes the marked relative weakness of M1 growth observable since 1983 to structural changes in the demand for money M1 which have led to a rise in the velocity of circulation of this aggregate. Explaining the fall in demand for M1, BNM

points to a number of factors including the rapid expansion in credit card usage, the introduction of Automated Teller Machines and high interest rates over the 1983/84 period. Because BNM view the trend in M1 growth as no longer having a stable and reliable relationship with economic activity, they have focused on the broader concepts of money since 1984. (AMM has always viewed M2 and M3 as being more reliable indicators of economic activity than M1 in Malaysia).

However, as Chart 1 indicates, at least in the first half of 1985, M2 also displayed a more restrained growth path than might be expected in the light of the basically expansionary influences operating on the monetary base over the year. M2 growth had slipped to 8.8% by July but over the first half of the year remained essentially on a flat trend between 9% and 11%, nevertheless still significantly below the flat 15% growth path that had previously obtained until mid-1983. The explanation for the comparatively restrained growth of M2 lies partly with the growth of government deposits at the commercial banks, referred to above. As shown in Chart 4, the growth of total deposits at the commercial banks increased markedly from late 1984 to reach 20% year-on-year by July, reflecting the sharp increase in government deposits - which are not included in the money supply. (Money supply is always defined as only currency and deposits held by the non-bank private sector.) Similarly, total eligible liabilities (i.e. liabilities against which the banks have to hold statutory reserve deposits at the BNM) were growing relatively rapidly, at 15% year-on-year, by July. Nevertheless, it seems likely that if MOF estimates for the overall balance of payments for the year were realised, then the money supply figures themselves, when released, will indicate some pick-up in official M2 growth in the latter part of the year. Certainly interest rates were in a clear downtrend throughout the year, even though BNM did have to exert pressure on commercial banks before they lowered their base lending rates in line with lower inter-bank interest rates.

Clearly, then, despite weak commodity prices and continuing reductions in public sector net external borrowings, liquidity conditions in 1985 in Malaysia cannot be said to have been markedly tight in either the banking sector or the economy as a whole - largely due to a variety of 'special factors' favourably affecting the balance of payments and the domestic sources of monetary base growth. The constraints on the Malaysian economy were, instead, more noticeable in the government finance figures than in the monetary figures. Federal Government net foreign borrowing fell to a very low level in 1985 - only M\$903 million - not just as a result of the government's desire to control external indebtedness but also because of the need for substantial prepayments of principal to smooth out bunching of repayments that would otherwise have occurred over 1987-88. Thus, in fact, Federal Government gross foreign borrowing totalled a record M\$6.314 bn in 1985, and it was the very high level of principal repayments - M\$5.411 bn - which reduced the net figure so substantially.

Government domestic borrowing was also under strain in 1985. The government has so far preferred to rely on traditional sources of domestic finance - i.e. the Employees Provident Fund (EPF) and the banks - for fear that liberalising the domestic bond market and extending the debt issue to other institutions and individuals (discussed in AMM Vol. 9 No. 3) could 'crowd-out' domestic investment. The demand for government bonds from traditional sources - specifically the banks and also, Petronas - was almost certainly lower than normal in 1985, however, as a direct result of the bail-out of Bank Bumiputra Malaysia Berhad (BBMB) by Petronas (see box). Petronas financed the M\$2.493 bn bail out by selling roughly two-thirds of its holdings of government debt to the banks, presumably largely to BBMB itself. The result of the rescue was, therefore, that the commercial banking sector ended up with holdings of government bonds far in excess of those necessary to comply with statutory liquidity requirements (and therefore banks' demand for government bonds was very low in 1985) whereas Petronas was left without the funds to purchase more government debt. The recent repatriation of offshore funds by Petronas, insofar as it is aimed at refinancing the BBMB rescue, is likely to raise the domestic demand for government debt in 1986. In 1985, however, the final cost of the

HOW PETRONAS' BAIL-OUT OF BANK BUMIPUTRA STRAINED GOVERNMENT FINANCING IN 1985

BANK BUMIPUTRA MALAYSIA BERHAD (BBMB)

(Balance Sheet Changes; M\$ bn.)

ASSETS		LIABILITIES	
<u>Loans</u>		<u>Deposits</u>	(unchanged)
Written off	= -1.0		
Sold to Petronas	= -1.26		
	= <u>-2.26</u>		
<u>Equity Investment</u>		<u>Capital</u>	
Book value of 30% Malayan Banking sold to Permodalan	= <u>-0.14</u>	Loans written off	= -1.0
		Profit on sale of 30% Malayan Banking	= +0.589
		Petronas equity injection	= +0.3
			= <u>-0.111</u>
<u>Government Bonds bought with Petronas equity injection</u>	= +0.3		
Sale of 30% Malayan Banking	= +0.729		
Sale of loans to Petronas	= +1.26		
	= <u>+2.289</u>		
Total	= <u>-0.111</u>		

PETRONAS

(Balance Sheet Changes; M\$ bn.)

ASSETS		LIABILITIES	
<u>Loans</u>			
Purchased from BBMB	= <u>+1.26</u>		
<u>Equity in BBMB</u>		<u>Capital</u>	(unchanged)
Purchased from Permodalan	= +0.933		
Injected into BBMB	= +0.3		
	= <u>+1.233</u>		
<u>Government Bonds</u>			
Sold to finance above	= <u>-2.493</u>		

The September 1984 rescue of Bank Bumiputra Malaysia Berhad by Petronas cost Petronas M\$2.493 billion in funds for the purchase of part of BBMB's loan portfolio and equity in the bank. Part of the transaction, detailed above, involved a three way share swap with Permodalan Nasional, under which Petronas bought Permodalan's stake in BBMB for M\$933 million, and Permodalan, in turn, bought BBMB's stake in Malayan Banking for M\$729 million. Thus, M\$204 million (M\$933 m - M\$729 m) of the Petronas funds can be said to have ended up with Permodalan (which nevertheless 'lost out' on the deal as it paid BBMB a M\$4 per share premium to the market price for the Malayan Banking holding). The remaining M\$2.289 billion (M\$2.493 bn - M\$0.204 bn) went to BBMB, this transfer of funds from Petronas to BBMB being financed by an equivalent sale of government bonds by Petronas to BBMB.

One result of the rescue, therefore, was that the commercial banking sector ended up with holdings of government debt far in excess of those necessary to comply with statutory liquidity requirements. The commercial banks as a whole, therefore, became net sellers, rather than net buyers, of government debt, significantly reducing the government's scope for domestic financing of the budget deficit in late 1984 and 1985.

BBMB bail-out was borne by the government as its domestic financing capacity was effectively reduced by M\$2.49 bn. As a result of the low domestic, as well as foreign, borrowings the government had to resort to a drawdown of assets to finance 40% of its M\$6.75 bn deficit in 1985.

The financing of the albeit expanded budget deficit of M\$7.441 bn forecast for 1986 should not present too much of a problem to the government. Acute pressure on liquidity and the economy is, however, quite likely to re-emerge in the absence of a surprise improvement in commodity prices, as the special factors which aided the balance of payments and domestic liquidity in 1985 will no longer be operative. Lower world interest rates may help to stabilise debt service payments and there is scope for some increase in public sector net foreign borrowings in 1986 (although a further reduction is forecast in the 'Economic Report') but, nevertheless, the surplus on the overall capital account of the balance of payments is likely to fall substantially. With the falling off of Petronas' fund inflows and probably lower corporate investment, net capital inflows are likely to fall to, at best, M\$4 bn - M\$5 bn from the M\$7.035 bn recorded in 1985. Thus, the maintenance of a healthy current account position is essential if the overall balance of payments is to remain in surplus and liquidity is to be prevented from becoming overly tight. This is, in effect, recognised in the MOF's projection of a marked narrowing in the current account deficit in 1986 - to M\$4.205 bn - as a result of a projected record trade surplus. In a sense these figures may be seen as targets as much as projections.

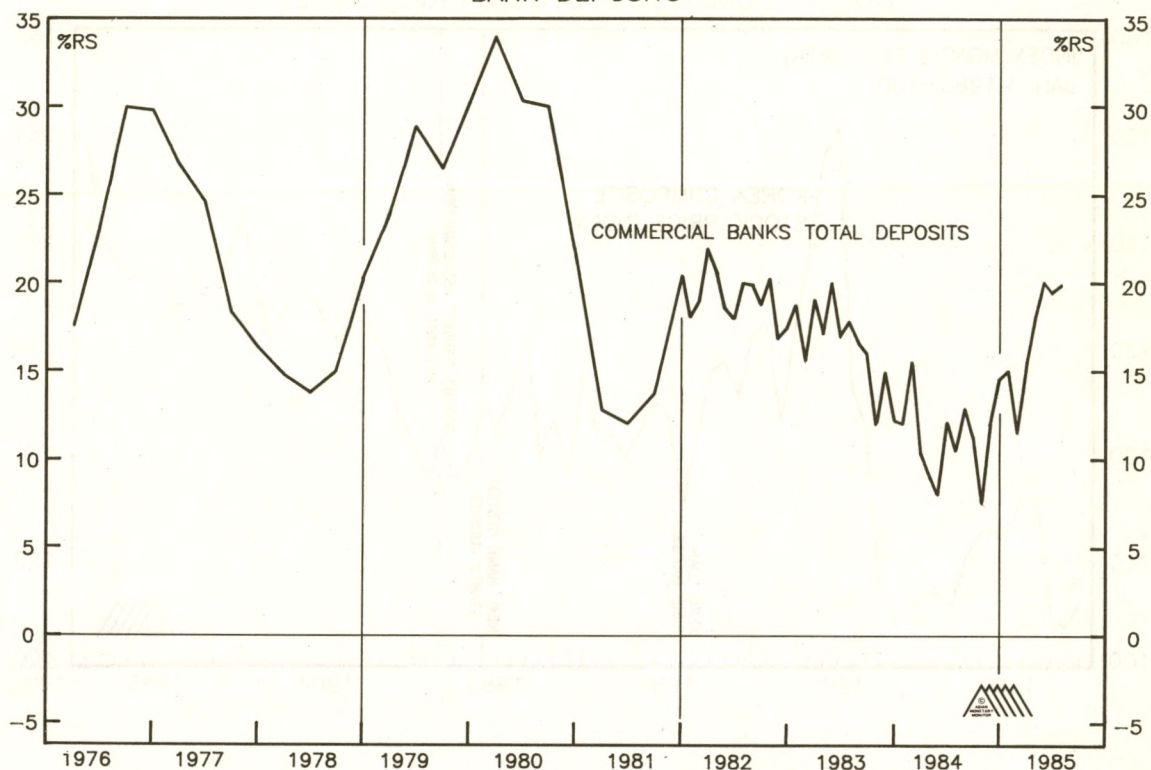
With comparatively little hope for much in the way of higher prices for Malaysian exports, the government has again turned to oil to generate the record trade surplus projected for 1986. The October budget featured an 18.6% rise in crude petroleum production - from 430,000 barrels per day in 1985 to 510,000 barrels per day, and a larger 22.6% rise in export volume - from 327,000 barrels per day to 401,000 barrels per day in 1986. With a forecast average oil price of US\$26 per barrel (slightly lower than the estimated average selling price of US\$27.5 per barrel in 1985) and an implied average exchange rate of US\$1 = M\$2.50, crude petroleum is seen as returning M\$9.514 bn in export revenue in 1986, which is M\$1.3 bn up on 1985 oil revenues and accounts for 75% of the increase in the trade surplus projected for 1986.

The extent to which oil plays a crucial part in the high targeted trade surplus can also be seen from price, volume and value projections for Malaysia's other major commodity exports given in the 'Economic Report'. Export revenues from all of Malaysia's other main commodities - palm oil, rubber, timber, tin - are seen as remaining roughly unchanged from 1985 levels in 1986. However, even the apparently conservative projection of unchanged export revenue for these commodity exports may not be easy to achieve unless commodity prices improve from current levels. At the time of writing (end-December) the prices of palm oil and rubber stand well below the 1986 year average prices forecast in the budget assumptions (M\$800 per tonne versus M\$1,000 per tonne for palm oil, and M\$1.80 per kg. versus M\$1.90 per kg. for rubber) and the market for tin (admittedly now a fairly insignificant export for Malaysia) remains in a state of crisis.

Thus, again, the well-being of the Malaysian economy rests largely on the health of the international oil market. The issue of oil prices and the Malaysian economy was discussed extensively in a previous AMM article (What Would Happen if Oil Prices Fell?, AMM Vol. 9 No. 1) where we estimated that a fall in the oil price significantly below US\$25 per barrel would have serious consequences for the economy. The US\$25 price assumed then-forecast levels of production, and this 'critical' price has now been effectively lowered as a result of the substantial increase in output proposed by Malaysia, to about US\$20 per barrel. However, this US\$20 per barrel level must be judged to have become correspondingly 'more critical' as the scope for output increases to compensate for price falls is being diminished as Malaysia approaches its maximum output capacity ceiling of around 550,000 - 600,000 barrels per day.

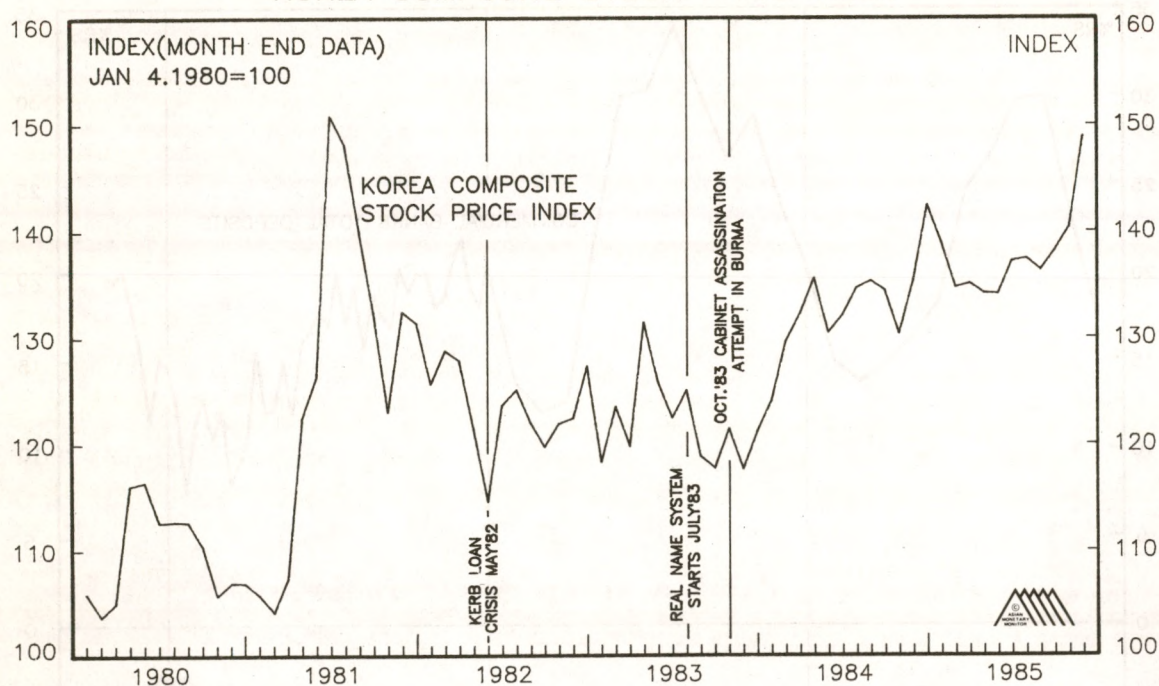
MALAYSIA: CHART 4

BANK DEPOSITS

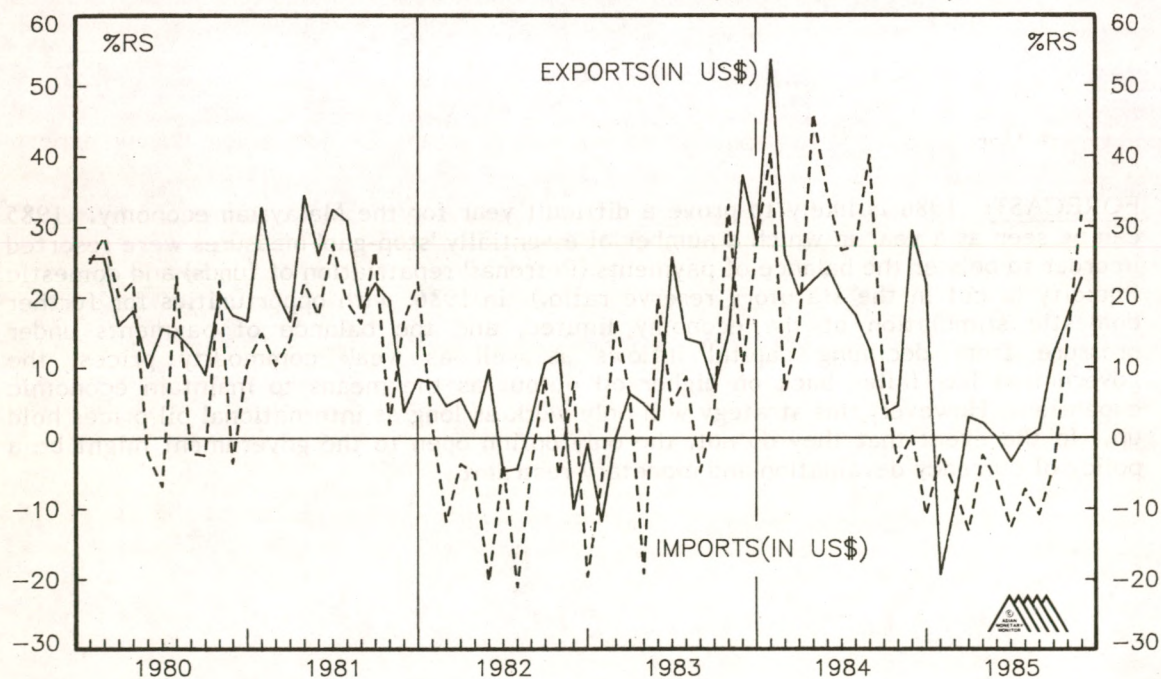


FORECAST: 1986 is likely to prove a difficult year for the Malaysian economy. 1985 can be seen as a year in which a number of essentially 'stop-gap' measures were resorted to in order to bolster the balance of payments (Petronas' repatriation of funds) and domestic liquidity (a cut in the statutory reserve ratio.) In 1986, with opportunities for further domestic stimulation of the economy limited, and the balance of payments under pressure from declining capital inflows as well as weak commodity prices, the government has fallen back on higher oil output as the means to maintain economic expansion. However, this strategy will only work as long as international oil prices hold up. In the event that they do not, the only option open to the government might be a policy of currency devaluation and monetary restraint.

S.KOREA: CHART 1
KOREA COMPOSITE STOCK PRICE INDEX



S.KOREA: CHART 2
EXPORT AND IMPORT GROWTH (IN US\$ TERMS)



REPUBLIC OF KOREA

A SOUND BASIS FOR A BULL MARKET

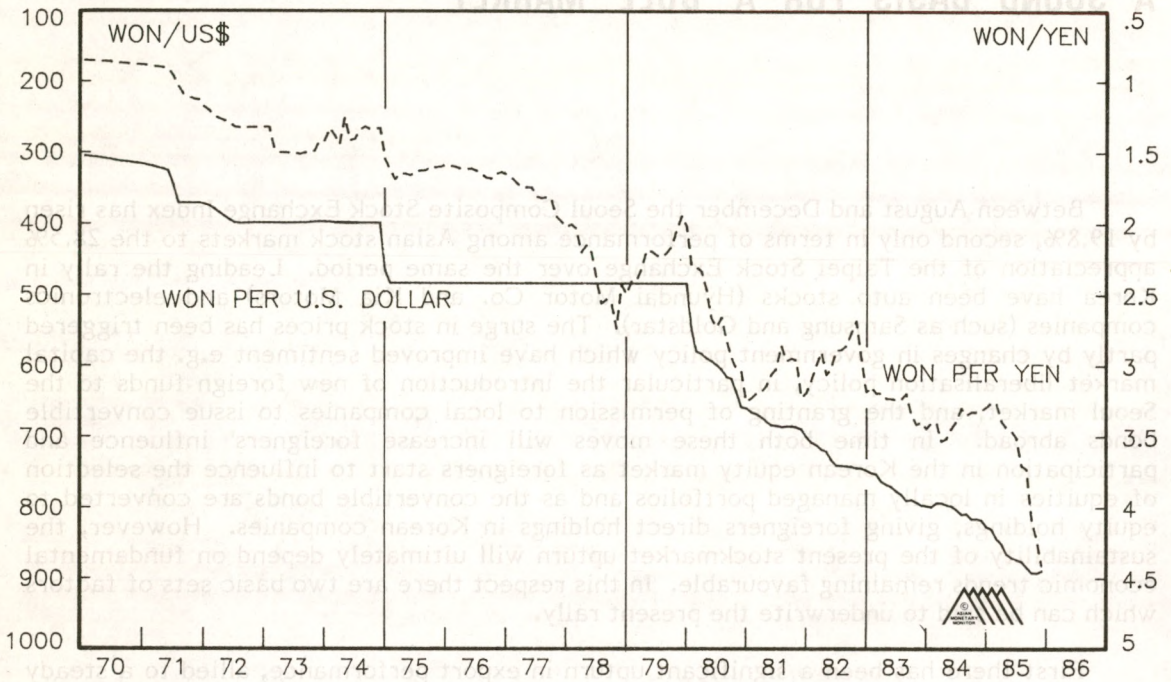
Between August and December the Seoul Composite Stock Exchange Index has risen by 19.8%, second only in terms of performance among Asian stock markets to the 28.5% appreciation of the Taipei Stock Exchange over the same period. Leading the rally in Korea have been auto stocks (Hyundai Motor Co. and Kia Motors) and electronics companies (such as Samsung and Goldstar). The surge in stock prices has been triggered partly by changes in government policy which have improved sentiment e.g. the capital market liberalisation policy, in particular the introduction of new foreign funds to the Seoul market, and the granting of permission to local companies to issue convertible bonds abroad. In time both these moves will increase foreigners' influence and participation in the Korean equity market as foreigners start to influence the selection of equities in locally managed portfolios and as the convertible bonds are converted to equity holdings, giving foreigners direct holdings in Korean companies. However, the sustainability of the present stockmarket upturn will ultimately depend on fundamental economic trends remaining favourable. In this respect there are two basic sets of factors which can be said to underwrite the present rally.

First there has been a significant upturn in export performance, allied to a steady improvement in the current and trade accounts since the first quarter of 1985. Measured in US\$ terms exports decelerated sharply from their peak growth rate of 53.7% in January 1984, and actually declined on a year-to-year basis between February and July of 1985. Since August, however, there has been a major improvement, with exports rising 13.0% in September and 22.6% in November (see Chart 2). The slowdown in export growth from mid-1984 was largely due to the "mid-course correction" in the USA, a market which accounted for over 37% of Korea's exports in the first ten months of 1985. (For more on the US mid-course correction see the Regional Survey article in this issue.) In the past five years there have been two sustained rallies in the Seoul stock market, each of them associated with strong export performance. The stock market surge of March-June 1981 occurred against a background of continuing strong export growth averaging just over 30% through the first half of 1981, while the rally from November 1983 through January 1984 came just as the export boom of 1983-84 gathered momentum in late 1983. The reason that the Seoul stock market did not rally earlier in 1982-83 in line with the rally on Wall Street from August 1982 was probably a result of the domestic liquidity squeeze imposed in Korea from late 1982 (see AMM Vol. 9 No. 1), and the continuing after-effects of the korb loan crisis of May 1982.

Contributing to the current upturn in Korean exports has been the continuous depreciation of the Korean Won against the US\$ through the first ten months of 1985, and the more recent depreciation of the US\$ against all other major currencies since March 1985. Between January and September of 1985 the Korean Won depreciated from 827.40 to 891.71 or 7.8% against the US dollar, as compared with a depreciation of 4% during the whole of 1984. Between the G-5 agreement in September 1985 and the end of November the Korean currency depreciated 17.6% against the Japanese yen (see Chart 3) from 373.46 won per 100 yen to 439.28. Against the US dollar the won actually appreciated, but only by a fractional 0.3% from 892.20 to 889.10 over the same period. Compared with December 1984 the won had depreciated by 34% against the yen and 7.8% against the dollar over the period January-November 1985.

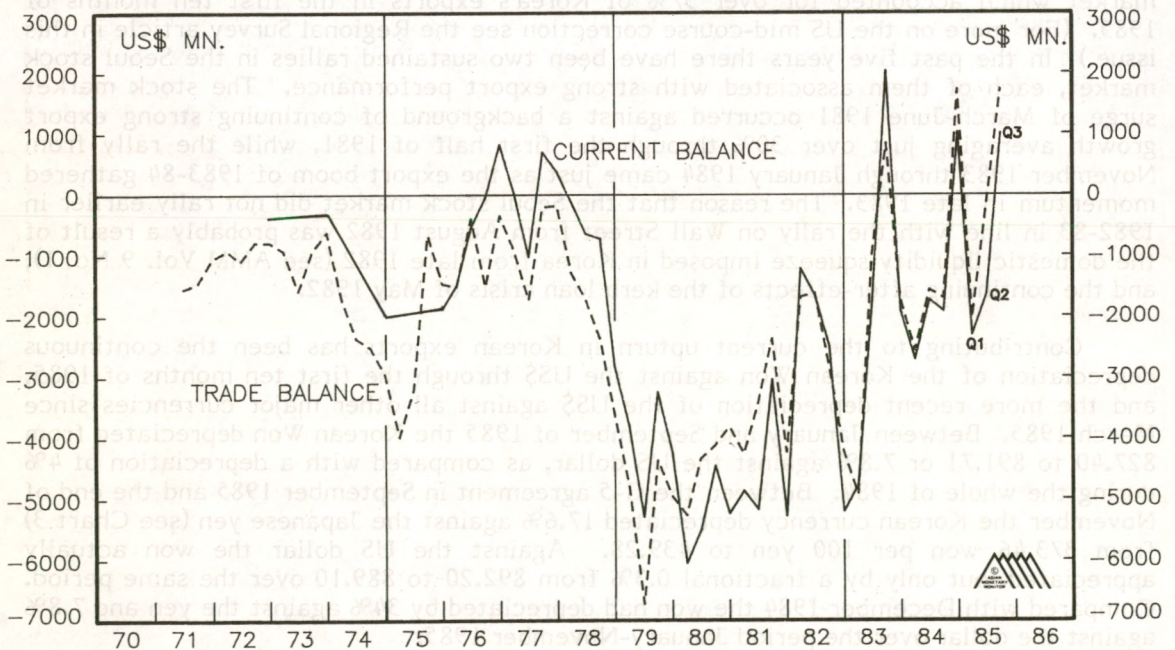
S.KOREA: CHART 3

EXCHANGE RATE OF KOREAN WON AGAINST US\$ AND JAPANESE YEN



S.KOREA: CHART 4

TRADE AND CURRENT ACCOUNT BALANCES



As both Japan and the US are major suppliers to Korea, the depreciation of the won against the dollar and the yen may initially be expected to raise import prices, and perhaps push up Korean wholesale prices by some 2-3%, but thereafter Korea's exports should start to benefit from enhanced competitiveness. After the USA, Japan is Korea's second largest export market, taking 15.9% of Korea's exports in the period January-October 1985. Considering the low current inflation rate in Korea (the CPI rose 2.6% in the year to October and the WPI rose 0.6% in the year to October - see Chart 5) and the relative weakness of the Korean won, Korea is thus extremely well placed to benefit from any upswing in global economic activity during 1986.

The second set of factors making for a favourable investment climate in Korea is the steady improvement in domestic liquidity conditions. Chart 5 shows how monetary growth was consistently decelerating in the period from late 1982 through mid-1984. Thereafter M1 slowed down somewhat further, but M2 levelled off at 6.5% in January 1985 and has subsequently accelerated to 13.3% in October, while M3 has stabilised in the 20-24% range. In view of the low level of inflation, current monetary growth in real terms is high by the standards of the past decade. For example during the stock market surge of March-July 1981 real M2 growth and real M3 growth were both in single digits, and during the 1983-84 rally real monetary growth (M2) was decelerating in line with nominal money growth (because inflation had already flattened out by mid-1983). The current rally is therefore the first stock market rally since 1980 which is supported both by favourable external trade performance and by improving domestic liquidity trends.

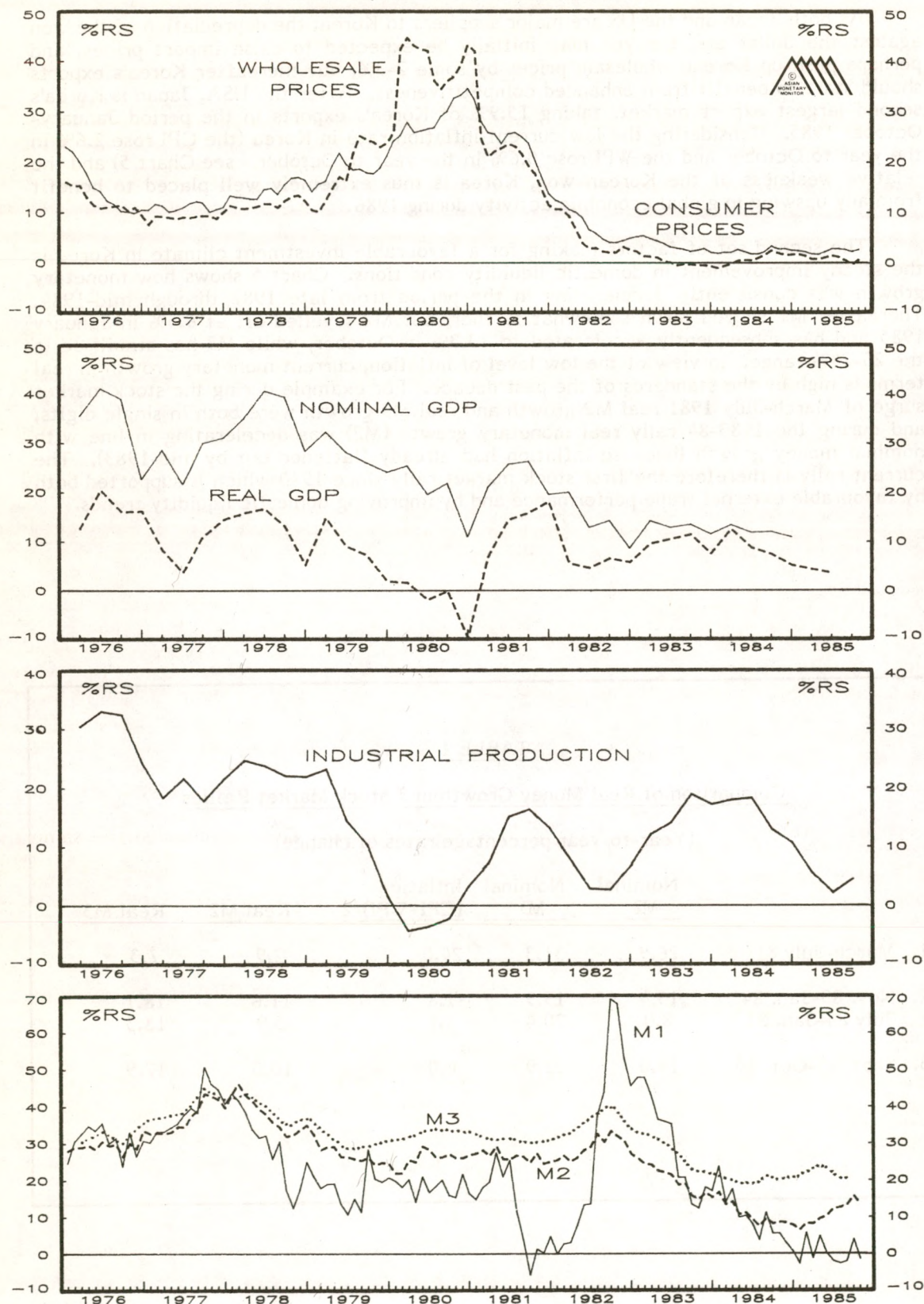
TABLE 1

Comparison of Real Money Growth in 3 Stock Market Rallies

(Year-to-year percentage rates of change)

	Nominal M2	Nominal M3	Inflation (CPI+WPI)/2	Real M2	Real M3
1. March-July 81	26.9	31.3	24.0	2.9	7.3
2. Nov. 83-Jan. 84	13.4	19.9	1.8	11.6	18.1
July 84-Jan. 85	8.0	20.4	2.1	5.9	18.3
3. Sept. 85-Oct. 85	14.0	21.9	4.0	10.0	17.9

S.KOREA: CHART 5 MONEY, OUTPUT AND PRICES

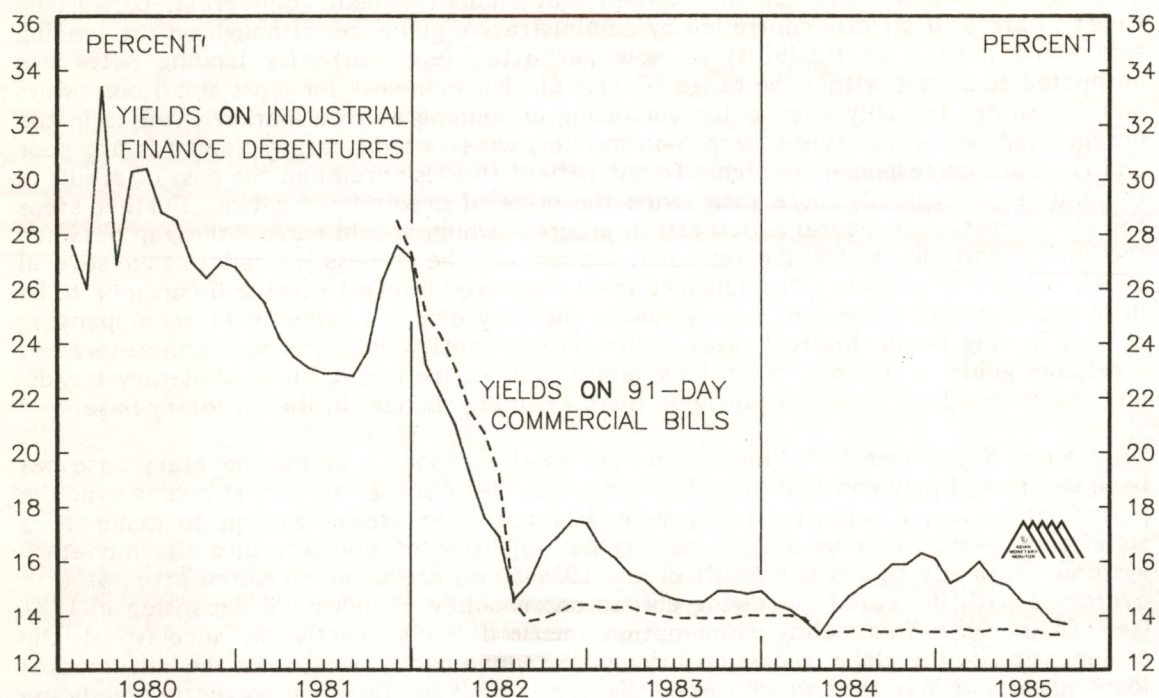


The improvement in liquidity conditions would be confirmed by a decline in interest rates - a move which has been widely expected but which has so far not been permitted. Lending and deposit rates at the Korean (government-owned) commercial banks (see Chart 7) are still strictly controlled by administrative guidance, although on the lending side some margin of flexibility is now permitted (e.g. currently lending rates are permitted to be set within the range 10-11.5%). Nevertheless for most small borrowers and depositors the only avenue for borrowing or lending at free market rates is in the unregulated and unsupervised kerb loan market, where credit rating standards are poor and risks are correspondingly high. To reflect this risk premium the cost of credit in this market is typically more than twice the price of credit from banks. Further steps toward interest rate liberalisation are in progress which should narrow the gap between the bank credit market and the kerb loan market, but the process is likely to take several years. Thus it is probable that changes in administered interest rates will continue to be in large, single-step changes, and following liquidity changes rather than accompanying or anticipating them. Interest rates as they are currently administered are therefore not a reliable guide to liquidity conditions, and it is more fruitful to study monetary trends, and the central bank actions underlying them - namely changes in the monetary base.

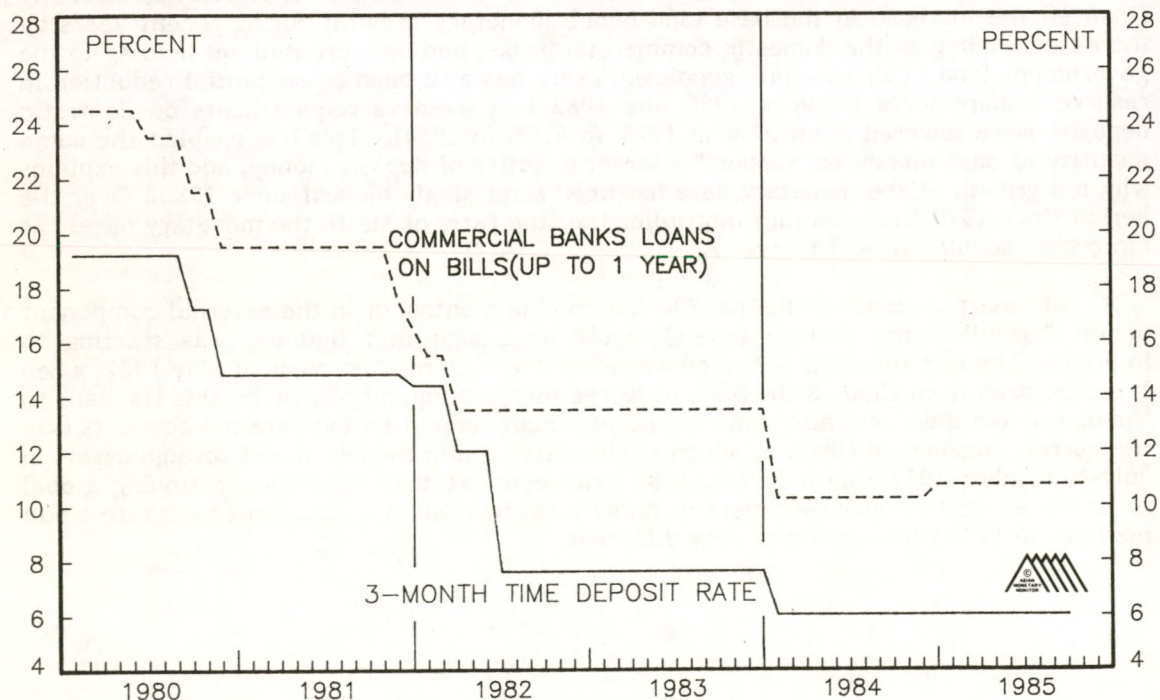
Since September 1981 the net foreign asset component of the monetary base has been declining fairly consistently. In other words, despite the two export booms over the period, the overall balance of payments has not been strong enough to generate a significant overall surplus and hence any net injection of liquidity into the monetary system. Basically this is the result of the 1979-80 oil crisis, which Korea attempted to overcome with increased borrowing abroad and a policy of industrial expansion in 1981 (see Chart 5). This policy combination misfired badly, partly on account of the prolongation of the global recession through 1982, and partly because of the kerb market loans scandal of May 1982 which forced the government to dilute the corrective medicine it had started to apply. Now that the current account is finally responding (Chart 4) to the sustained money and credit squeeze of 1982-84, however, it is conceivable that during 1986 Korea's external accounts could be strong enough for the first time to generate an overall balance of payments surplus, an accumulation of net foreign assets and hence an injection of liquidity from this source. The Bank of Korea has basically financed the increase in the base (and hence monetary growth) during recent years by increased lending to the domestic commercial banks, and by increased net lending to the government (and other official agencies). There has also been a substantial reduction in reserve requirements between 1980 and 1982 (e.g. reserve requirements on domestic deposits were lowered from 27% in 1979 to 4.5% in 1984). This has enabled the same quantity of base money to "support" a larger quantity of deposit money, and this explains why the growth of the monetary base has been surprisingly modest since 1980. Over the period since 1979 the monetary multiplier (i.e. the ratio of M2 to the monetary base) has more than doubled from 3 to over 7.

Any sharp increase in the base in the coming months, or in the external component of the base (i.e. net foreign assets) would be a sign that liquidity was starting to improve. The last time this occurred was after the kerb market crisis of May 1982, when it can be seen from Chart 8 the Bank of Korea injected liquidity by increasing its loans to the banks, and there was also some temporary improvement on the external accounts (see the current account in Chart 4, which is also reflected in the rise in net foreign assets in July-November 1982 shown in Chart 8). However, at that time the continuing global recession as well as poor sentiment at home was obviously not sufficient to create a bull market. In 1986 things could be very different.

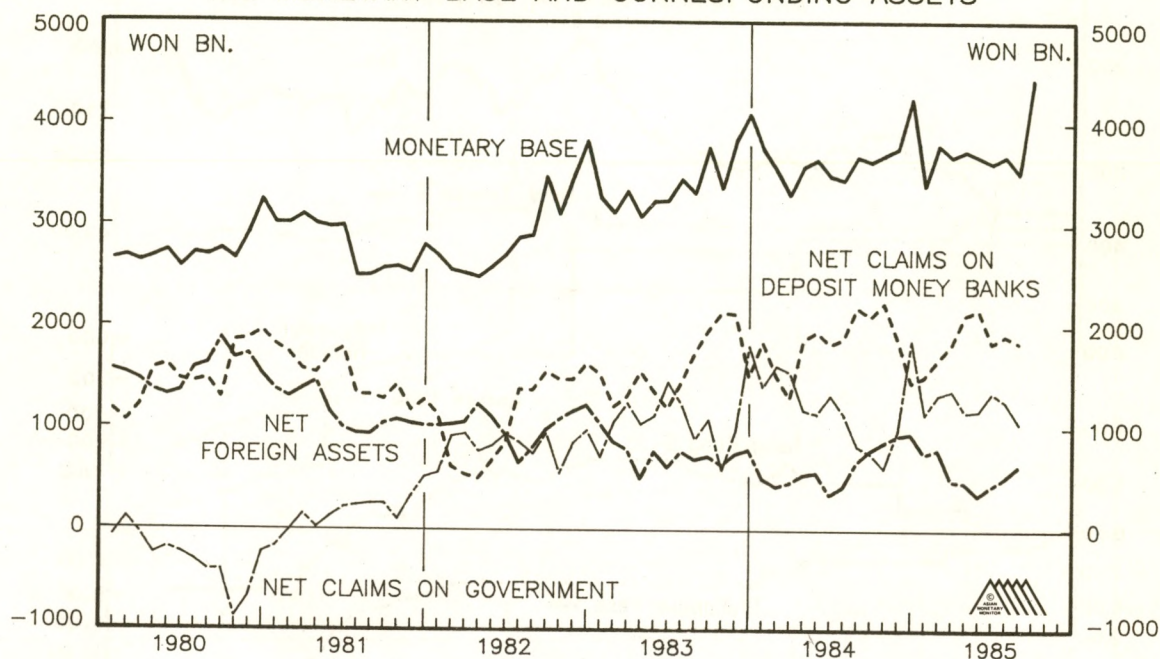
S.KOREA: CHART 6
YIELDS ON DEBENTURES AND COMMERCIAL BILLS



S.KOREA: CHART 7
REGULATED DEPOSIT AND LENDING RATES OF COMMERCIAL BANKS

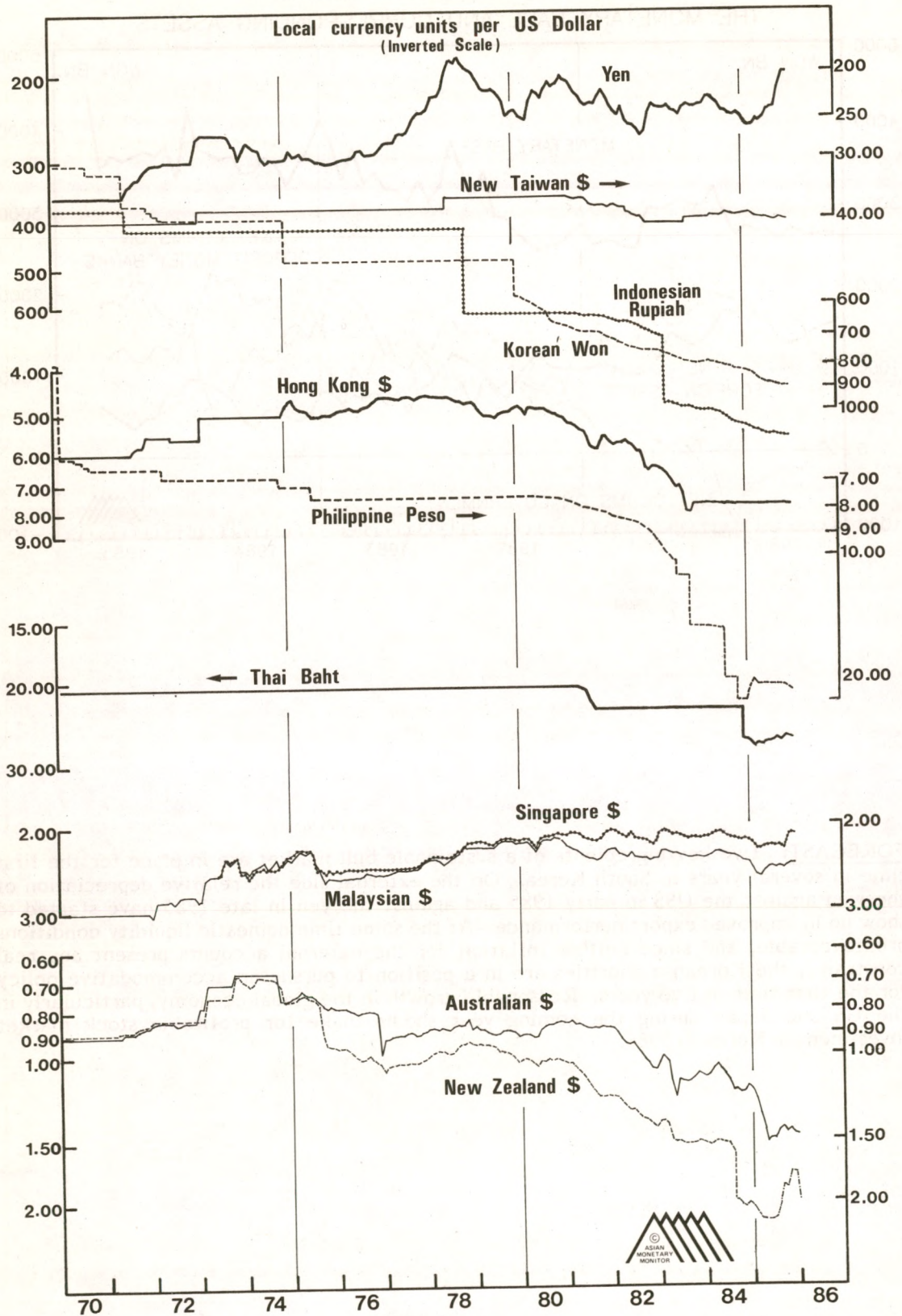


S.KOREA: CHART 8
THE MONETARY BASE AND CORRESPONDING ASSETS

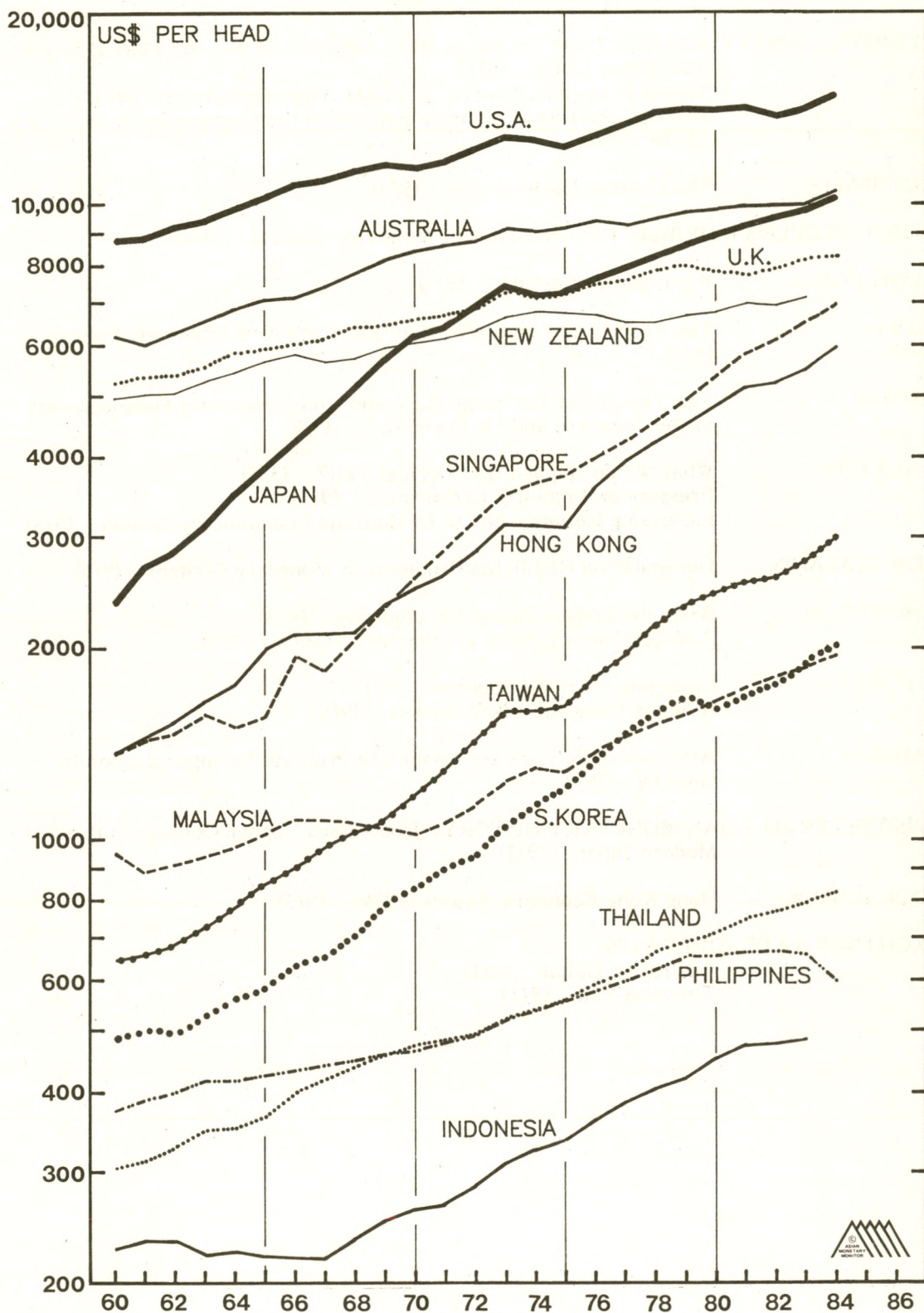


FORECAST: Two key ingredients of a sustainable bull market are in place for the first time in several years in South Korea. On the external side the relative depreciation of the won against the US\$ in early 1985 and against the yen in late 1985 have started to show up in improved export performance. At the same time domestic liquidity conditions are favourable, and since neither inflation nor the external accounts present any real constraint, the Korean authorities are in a position to pursue an accommodative policy for the first time in five years. Reasonable growth in the global economy, particularly in the US and Japan during the coming year should make for profitable stock market investment in Korea in 1986.

EXCHANGE RATES IN THE FAR EAST



REAL PER CAPITA GDP IN ASIA (CONSTANT 1983 PRICES)



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ASIAN MONETARY MONITOR

is published by
Asian Monetary Monitor Ltd.,
P.O. Box 12964, G.P.O.,
Hong Kong.